137 819

A HISTORY

OF:

CLASSICAL PHILOLOGY

FROM THE SEVENTH CENTURY B.C.

TO

THE TWENTIETH CENTURY A.D.

BY

HARRY THURSTON PECK, Ph.D., LL.D.

MEMBER OF THE NATIONAL INSTITUTE OF ARTS AND LETTERS

New York
THE MACMILLAN COMPANY
1911

All rights reserved

Copyright, 1911, By THE MACMILLAN COMPANY.

Set up and electrotyped. Published October, 1911.



PREFACE

Long experience has convinced the author that, as a rule, classical students, even those who are pursuing the most advanced courses, are very imperfectly informed as to the history of the subjects upon which they are engaged. They may be thoroughly trained in various ramifications of Classical Philology, while knowing little or nothing of Classical Philology as a whole. It seems an anomalous thing that any university student should proceed to his doctorate in Greek and Latin without ever having had a conspectus of the entire field of which he is familiar with a part; that, for example, he should be able to give no intelligent account of the Alexandrian School; that the significance of the Renaissance to a classicist should not be clear to him; that Scaliger, Lipsius, Casaubon, Bentley, Corssen, and Lachmann should be little more than names; and that he should have learned nothing genetically about literary criticism, text criticism, and scientific linguistics.

Yet such is very often the case; and though it is to be regretted, it is not a reasonable cause for censure. There

viii preface

exist no manuals at the present time to give this general information in a lucid, coherent manner, and without losing sight of the strand which unites all classical studies and makes them parts of a splendid whole. Gräfenhan's book in four volumes, the publication of which was begun in 1843, is, of course, quite obsolete to-day. Reinach's Manuel de Philologie Classique is admirable as a work of reference, but, with all its closely packed information, it does not form a continuous narrative. The treatise by Dr. Sandys, published only a few years ago, is a monument to his scholarship and wide reading; yet the multiplicity of details contained in its three volumes will not unnaturally deter a student, unless he be a very heroic seeker after knowledge.

The present work has, therefore, been written with the desire to give a comprehensive and comprehensible knowledge of how classical studies were first developed, and of that gradual evolution which has made Classical Philology a science, possessing at the same time some very distinctly marked æsthetic phases. It has seemed best to mention the names of only such scholars as have helped on this evolution by adding something to the sum of human knowledge. The adoption of such a plan has made it possible to compress into a volume of convenient size all that is essential; while the bibliographical references will enable the reader to pursue more exhaustively any particular subject that has here been touched

upon. It is hoped that the book may be of some practical service to students of the classics, in helping them to see and understand the unity which in their studies is too often obscured by matters of secondary importance.

HARRY THURSTON PECK.

New York, March 29, 1911.

TABLE OF CONTENTS

Prefa			•		•			•	•	•	PAGES VII—IX
CHAPT I.		GENE	ESIS	OF	PHIL	oLog	ICAL	STU	DIES	IN	
	Gı	REECE		•			•				5-27
II.	THE	Præ-	ALE	XAND	RIAN	PER	OD				28-87
III.	THE	ALEX.	AND	RIAN	Peri	αo					88~129
IV.	THE	GRÆC	o-R	OMAN	PER	COL					130~191
v.	THE	MIDD	LE A	AGES				•			192~259
VI.	THE	RENA	ISSA	NCE	•			•	•		260-288
VII.	Divi	SION II	OT	Peri	ODS		•	•		•	289
VIII.	THE	AGE	OF]	Erasi	MUS		-				290-300
IX.	THE	PERIO	o a	F NA	TION.	ALISM	x .		•		301-384
x.	THE	GERM	AN	Infli	JENCI	ε.					385-455
XI.	Тне	Cosm	OPOI	LITAN	PER	IOD		•	-		456-458
SELEC	TED E	BIBLIO	GRAI	HICA	L In	DEX					461-476
GENE	RAL IN	DEX		_				_	_	_	477-40I

I.

THE GENESIS OF PHILOLOGICAL STUDIES IN GREECE

The origins of the Hellenic people are exceedingly obscure, and they take us back to a remote antiquity. The fact that there was no generic name for the race until after the time when the Homeric poems were composed is a very interesting and instructive fact. One cannot even say that the Greeks were homogeneous; and a great deal of the most modern research has served only to darken counsel and to expose the fallacy of earlier theories. Certain it is that, during the Stone Age and afterwards, there streamed over the Grecian peninsula great waves of migratory peoples from the northeast. They forced their way to the southern point of the Morea, just as they also found homes in southern Italy in the Grecian islands, and a sure foothold in Asia Minor.

It is a picturesque hypothesis which views the latter country as having once been peopled by an effeminate race of Semitic origin, tracing their descent through polyandrous mothers, and worshipping female deities, among whom the Great Mother, afterwards called Cybele, was supreme. That these enervated Canaanitish shepherds should have been subsequently overcome by a

horde of virile conquerors from Thrace is another part of the same ethnic theory. These conquerors, tracing their descent through their fathers and worshipping the great male thundering deity, Bronton or Zeus, were possibly true Hellenes, and they established a civilisation of their own in Asia, where they ruled as an aristocracy in the states and cities which they subsequently founded.¹

Yet this is only one of many theories, and it presents as many difficulties as it explains. The importance of it lies in the fact that it serves to show how very far back into the past we must look for anything like a beginning of that culture which came afterwards to be regarded as essentially Hellenic. The explorations at Mycenæ and Tiryns and elsewhere, though attesting the antiquity of certain of the arts, leave us still at a loss regarding the racial affinities of the early Greeks. One is justified in asserting nothing more than that the lands which became subsequently Hellenized were first populated by sections of the Mediterranean race comprising the so-called Pelasgians, the Iberians, the Ligurians, and the Libyans.² A later migration from the north, moving slowly southward, overwhelmed the original inhabitants of what was destined to be known afterwards as Hellas, or Greece. Professor G. W. Botsford has described in a very interesting manner

¹See Ramsay, in the Journal of Hellenic Studies, ix. 351; and Gardner, New Chapters in Greek History, pp. 28-54 (New York and London, 1892).

² See Sergi, The Mediterranean Race. Eng. trans. (London, 1901).

the nature of this migration.1 "They came in bands which we call tribes, each under its chief. Their warriors travelled on foot, dressed in skins and armed with pikes, and with bows and arrows, while their women and children rode in two-wheeled ox-carts. They found Greece, their future home, a rugged, mountainous country, with narrow valleys and only a few broad plains. Everywhere were dense forests, haunted by lions, wild boars, and wolves." These Greeks of the Tribal Age were seminomadic in their habits; since at first they built mere huts of brush and clay, which they readily abandoned, and they must for centuries have shifted their uncertain habitations. At the west of their new country the coastline was nearly straight and with no harbours. "But those who came to the eastern coast found harbours everywhere and islands near at hand. They began at once to make small boats and to push off to the islands.

"But they must have been astonished when they saw for the first time strange black vessels, much larger than their own, entering their bays. These were Phœnician ships from Sidon, an ancient commercial city, and in them came 'greedy merchant men, with countless gauds'

¹Botsford, A History of the Orient and Greece (New York and London, 1904). See also E. Meyer, Forschungen zur alten Geschichte, vol. i. (Halle, 1892); Hall, The Oldest Civilisation of Greece (London, 1901); and Ridgeway, The Early Age of Greece (Cambridge, 1901, foll.). A recent, yet not fully accepted view, regards the Pelasgians as having worked out this civilisation, the fruits of which were appropriated by the true Hellenic invaders from the north.

for trading with the natives. Though in most respects the Greeks were then as barbarous as the North American Indians, they were eager to learn and to imitate the ways of the foreigners. The chieftains along the east coast welcomed Asiatic arts and artisans. From these strangers they gradually learned to make and use bronze tools and weapons, and to build in stone. Contented in these homes, they outgrew their fondness for roving. Skilled workmen from the East built walled palaces for the native chiefs; artists decorated these new dwellings, painted, carved, and frescoed, made vases and polished gems. Those chieftains who were wise enough to receive this civilisation gained power as well as wealth by means of it. With their bronze weapons they conquered their uncivilised neighbours, and, in course of time, formed small kingdoms, each centring in a strongly fortified castle."

The contradictions which meet us in all accounts of early Greece make any positive hypothesis untenable. But they do give us an insight into the character of the Greek genius as we have come to know it. There is much plausibility in the view that these Hellenes were racially connected with the Celtic peoples, and that they were not originally of one single stock. Restless, brave, mercurial, full of curiosity, their nomadic life for many centuries made them more brilliant than stable. Politically, they also afford a parallel with the Celts, in that

they lacked the national cohesiveness which was Roman. Their seafaring gave them a larger outlook than the Latins had. It made for separation rather than for unity. On the other hand, it stimulated the intellect, and enhanced the qualities of imagination and speculation. To the last, the Greeks were adventurous, ingenious, inquisitive, and ever seeking after something new and interesting.

The antiquity of Greek culture explains why the oldest monument of Hellenic literature, the Homeric epic, is not a rude specimen of the poetic art, but rather a bit of exquisite workmanship, wrought out with wonderful management of light and colour and melodious sound. It is the climax, the final masterpiece, of epic poetry. Although the Homeric epics tell the story of a fairly primitive people, there is nothing primitive in the mode of their construction or the deftness of touch that is everywhere to be discovered in them. The Iliad and the Odyssey, though very much older, assume a fairly definite form somewhere in the seventh century B.C., when writing was first generally introduced among the Greeks. Recent scholarship is not indisposed to view these two poems as representing each an organic whole, however numerous may have been the changes which both underwent in parts.1 It does not concern us, indeed, to determine

¹ See Blass, Die Interpolationen in der Odyssee (Halle, 1904); and Bréal, Pour Mieux Connattre Homère (Paris, 1906).

whether there actually lived an individual Homer. The student of Classical Philology regards the Homeric epic as a starting-point from which to trace the gradual development of intellectual pursuits among the Greeks within that period of time when their history can be tested by undoubted facts. Before the general use of writing, there could have been little to be classed under the name of formal scholarship, although for fifteen centuries there was an evolution of the arts which scholarship endeavours to study and explain. Before the Homeric period there must have been thousands of poets who became masters of the lyric, and after that of the epic. We know that Greek tradition held Thrace to be the earliest home of this semi-religious literature, associated with the names of mythical bards such as Orpheus, Musæus, Eumolpus, and Thamyris. Finally, we know that the centre of cultivation shifted from Thrace to the more genial shores of Ionia, whence came the completed epic which is ascribed to Homer.

The chief importance of the epos for our present purpose is found in its relation to literary study, to criticism, and even, after a fashion, to scientific speculation, to religion, and to philosophy. The part which the *Iliad* and the *Odyssey* played in the early period of Greek education was extraordinary. These poems were, indeed, the basis of all training that was not purely physical. In the schools, which we know to have existed as early

as 700 B.C., Homer was read, not so much as literature, but as an ultimate authority on history, politics, ethics, warfare, medicine, and even religion. Questions that involved titles to lands were settled by an appeal to the Homeric poems, which were consulted according to the theory of their plenary inspiration. In the *Odyssey* this theory is in fact expressly stated. A poet is one who is inspired by the Muses; and the bard Phemius says to Odysseus: "I am self-taught; but it was a god that breathed into my mind all the various ways of song."

A touch of orientalism is found in the notion of Democritus (in the fifth century, B.C.), to the effect that all great poets are mad — that is to say, carried away by a sort of divine frenzy. Such a belief accounts for the place which Homer, the greatest of all the poets, held in the intellectual life of Hellas. In the study of his epics, we find the germs of many other studies. Lists were made of the unusual words contained in them. The relations of the gods to each other and to mankind were all thought to be explained by Homer. An apt quotation from the Iliad or Odyssey would silence an opponent in debate, as effectually as a pointed text from the Bible would end a controversy among the Puritans. Indeed, what the Hebrew Bible is to the orthodox Tews, what the New Testament is to the orthodox Protestant Christians, and what the Koran is to orthodox Muhammadans, - this the Homeric poems were to the early Greeks. A

reverence for Homeric learning was entertained among them at the time when their authentic history begins. Its strong influence affected the minds of men in later centuries, as we shall presently have occasion to see. Even in our own days its existence is discernible in the minutely critical studies which modern scholars have made regarding every topic that was even casually touched upon by Homer. 1 It may be added that much of the same inspiration which was ascribed to the author of the Iliad and the Odyssey, was also attributed to the minor poets, commonly called the Cyclic Poets, who largely imitated Homer and confined themselves within a certain round or cycle of tradition. There were really two cycles, one a Mythic Cycle, relating to the genealogies of the gods and the battles of the Titans and to cosmogony; and the other a Trojan Cycle, based upon stories connected with the Trojan War. The most celebrated of the Cyclic poems were the Cypria, at one time ascribed to Homer, but later to Stasinus or Hegesias, the Æthiopis of Arctinus, and the Nostoi of Agias, not to mention the parodies by Pigres.² There were likewise the so-called

¹ See, for example, Seymour, *Life in the Homeric Age*, with the bibliography, pp. xiii–xvi (New York, 1908); and Adam, *The Religious Teachers of Greece*, pp. 21–67 (Edinburgh, 1908).

²The chief authority for the Cyclic poets is the *Chrestomatheia* of Proclus (412-485 A.D.) in the extracts preserved by Photius. See Welcker, *Der Epische Cyclus* (Bonn, 1865); Lawton, *The Successors of Homer* (New York, 1898); and for the meaning of the word cyclicus, a paper by D. B. Munro in *The Journal of Hellenic Studies* (1883).

Homeric Hymns, and the three works that remain to us under the name of Hesiod (c. 700 B.C.), whose *Theogony* is the oldest poem that we possess on Greek Mythology.

When the Greeks came to know much more than they had known about the geography of the world in which they lived, and when by experience they grew more thoroughly enlightened as to other knowledge which came to them in many ways, then they found that Homer was not to be accepted literally and as a wholly inspired source of wisdom. Thus there arose a Higher Criticism of the Homeric writings as there has arisen a Higher Criticism of the Bible. When so much depended upon the understanding of a line or of a passage, it was essential that every one should be quite sure that the line or the passage was correctly quoted. Even the variation of a single word, or the interpolation of a single verse, might be a matter of extreme importance. Yet the Homeric poems were not, at first, written down according to an accepted text. They differed in many places. Parts of them were recited, detached from the whole, at festivals and public entertainments, by the rhapsodes or declaimers. Therefore, in the sixth century B.C., a recension of them was necessary so that there should be standard editions of the Iliad and of the Odyssey.

That such a recension was actually carried out is scarcely to be doubted, though to whom it is due no one can surely say. Tradition ascribes it to the Athenian "tyrant," the brilliant and sagacious Pisistratus, who is said to have committed the work (about 530 B.C.) to a commission of four learned Homeric specialists.¹ In this, Pisistratus is said to have followed out a plan conceived by his relative and predecessor, Solon. The tradition referred to is merely a tradition and is based only upon the authority of later writers such as Cicero, Pausanias, Josephus, Libanius, and Tzetzes. Therefore the ascription of this standard Homeric text to Pisistratus is not necessarily accurate. It has been the custom to credit Pisistratus with an extraordinary number of innovations, - political, social, literary, and artistic. Thus, he is said to have enforced a series of sumptuary laws; to have supplied the poor with cattle and seed so that they might leave Athens and betake themselves to agriculture; to have erected beautiful buildings; to have regulated the religious rites, and to have instituted the superb festival

¹ See Flach, Peisistratos und seine litterarische Thätigkeit (Tübingen, 1885). The Greek grammarian Diomedes, quoted by Villoison, says that a staff of seventy (or seventy-two) men of letters took part in the work. It has been noticed in modern times that neither Herodotus nor Thucydides nor Plato nor Aristotle, who all frequently mention both Homer and Pisistratus, makes any allusion whatever to this alleged recension of the Homeric text. So significant is this omission, that modern students of the subject (for example, Wilamowitz) are disposed to deny that the story about Pisistratus has any basis of fact at all. One may hold a more moderate opinion and regard Pisistratus as having rearranged the text for purposes of recitation at the Panathenaic festival, yet with no minute consideration of particular lines. See infra, p. 20.

of the Greater Panathenæa; to have encouraged Thespis to produce his primitive tragedies at Athens, thus promoting the Drama; and to have been the first person in Greece to collect and open a library for public use. Hence it is natural that the establishment of a standard Homeric text should have been ascribed to Pisistratus. In any case it does not matter whether he or some one else brought it into form. There is reason for supposing that he compelled the public declaimers to recite the different portions of the poems according to a definite arrangement; and indeed that a recension was undertaken in his time is highly probable, since the quotations from Homer made by writers prior to the Alexandrian period exhibit very slight variations. The Alexandrians themselves made few important changes. We may be confident that our text of Homer is substantially identical with that which was read five hundred years before the beginning of the Christian era. Thus, one hundred and fifty-two passages from Homer are cited by twenty-nine writers after and including Herodotus. They amount to about four hundred and eighty lines, but they contain less than a dozen lines which are not in the ordinary text.1

If Pisistratus ever made an Homeric text, it was not the only official text of the two great epics, since we also hear of "city editions" or "civic editions," which

¹ See Ludwich, *Die Homer-vulgata als voralexandrinisch erwiesen* (Leipzig, 1898).

were standards each in its own country.¹ The important fact is that at so early a period there should be found a beginning of **Text Criticism** in which, as now, many sources of knowledge must have been drawn upon—chronology, history, geography, and, to a certain extent, æsthetics, more especially the æsthetics of language.

It is interesting to remember that Solon was accused of having interpolated a line in the *Iliad* so as to make it appear that the Athenians had taken part in the Trojan War, and that Pisistratus had inserted a line in the *Odyssey* so as to bring in the name of Theseus, the national hero of Athens. We have, therefore, as early as the sixth century, indications of all the difficulties which beset text critics in modern times — variant editions, errors due to carelessness, others due to ignorance, and also conscious alterations to suit the purpose of the transcriber. Nor was Homer the only author whose text suffered in this way; for there is a story to the effect that Onomacritus was detected in altering the oracles of Musæus and that he was punished for it.

There is some significance in the legend that the first carefully prepared edition of Homer was made in Athens, rather

¹ Seven of these "city editions" are noted—the Massalotic, the Sinopic, the Chian, the Cyprian, the Argive, the Cretan, and the Lesbian. The first four were Ionic, and the last three were Æolic. All of these editions were supposed to have been copies made from the archetype prepared under the direction of Pisistratus. The Greek term for "city editions" is $\dot{\epsilon}\kappa\delta\delta\sigma\epsilon\iota s$ $\kappa\alpha\tau\lambda$ $\pi\delta\lambda\epsilon\iota s$.

than among the Asiatic Ionians, who had represented a higher form of culture. Athens was destined to become the intellectual centre of the Greek world, though it had not yet won supremacy. Ionia has the credit of having first established regular schools with paid teachers for the purpose of imparting a general education. The teaching of which we read in Homer was, of course, physical training with some instruction in music and medicine. The public instruction given to youths in the Doric States such as Sparta and Crete had very much the same character.1 The Bidiæi and Pædonomi, under whose care the Spartan boy was placed after the age of seven, trained the young in gymnastics, in the use of arms, and in choral singing. For such literary education as a man was expected to possess (usually only reading, writing, and a little arithmetic) he depended chiefly upon the instruction which was given by his parents. It is stated by Plutarch that the semi-mythical Lycurgus brought copies of the Homeric poems to Sparta, and made a knowledge of them a requirement in the Spartan schools; but if so, this must have been due to the fact that he had travelled in Asia Minor and had introduced at home a practice which he had observed abroad. Among the Ionians, however, literary teaching in regular Schools is found as early as the seventh century B.C., and as these schools were then in a very prosperous condition and

¹ See Monroe, Source Book of the History of Education (Greek and Roman Period) (New York, 1901).

very largely attended, they must have been established long before. Herodotus (vi. 27) mentions a boys' school in Chios in the year 500 B.C.; and at the time of the invasion of Xerxes, when the Athenians left their own city and took refuge at Træzen, one of the first things they did was to arrange for their school system during the period of their temporary exile.¹ The Mitylenæans punished disloyal allies by depriving them of the right to maintain schools. Charondas, about 650 B.C., made state provision for literary instruction in Sicily.²

The teaching of literature appears to have been developed, first of all, as an adjunct to instruction in morals. The earliest intellectual exercise of boys at school, and probably before they had begun to attend school, was the study of the Homeric poems. This anticipated even the learning of the alphabet; for the alphabet was first taught by the γραμματιστής, while the Iliad and the Odyssey were read and recited to growing boys, who were urged to learn them gradually by heart. But the early appreciation of the epics was not a literary appreciation at all; and to understand the prominence given to this study, we must remember the peculiar view which the Greeks took with regard to Homer. He was not so much the great poet, the master of heroic verse. He was rather a moral teacher, an ethical guide, who drew his characters with

¹ Plutarch, Themistocles, 10.

² Diodorus Siculus, xii. 12.

a conscious purpose of exhibiting in their actions the qualities that men should emulate or shun. As late as Horace who, like all Romans, was a great lover of the concrete, we find this same thought expressed.

"While you are declaiming at Rome," he says to his friend Lollius, "I have been reading over at Præneste the writer of the Trojan War, who tells us better and more clearly than either Chrysippus or Crantor what is noble and what is base, what is expedient and what is not."

And farther on, "Again, as to what virtue and wisdom are able to effect, he (Homer) has set before us a useful model in the person of Ulysses."

The strenuous insistence on a thorough knowledge of Homer was therefore due, first of all, to his moral teaching. We must remember also that the formal education given in school was much less valued by the Greeks than it is by us. Plato says in his Laws that a knowledge of writing is necessary only so far as to enable one barely to write and read; and that to write fast or with elegance is outside of the range of ordinary education. There may even have existed, as Mahassy suggests, a prejudice against clear and regular script, because it would recall the writing in books which was done by copyists who were slaves. When we say that a person writes "a clerkly hand" the remark is not altogether complimentary. Hence, the average Greek probably wrote with more or less diffi-

culty, and did not have, as a rule, much occasion to use the accomplishment. But inasmuch as he memorised most of his learning, he was the more deeply saturated with it.

So it came about that the universal familiarity with Homer resulted in a very general criticism of the Homeric poems. As Mr. Saintsbury well says, "It was impossible that a people so acute and so philosophically given as the Greeks, should be soaked in Homer without being tempted to exercise their critical faculties upon the poems." 1 Such was indeed the case; and thoughtful men began to ask themselves whether a great moral teacher who represented the gods as deceitful, faithless, and debauched could be really a moralist at all. Likewise, contradictions and statements were pointed out which practical knowledge showed to be untrue. Then began an attempt to give an allegorical or a rationalistic interpretation of Homer, which should preserve his authority and yet reconcile it with the facts of human life. We find traces of the Solar Myth at about this time, and ingenious interpretations like those which the Rabbinical writers have given of portions of the Hebrew Bible. Here is the beginning of Literary Criticism - though not "literary" in the rightful sense, for it had to do chiefly with mere words and not the form of Homeric and other poetry. Nevertheless, it was a beginning; and in succeed-

¹ Saintsbury, A History of Criticism, i. pp. 10-12 (New York, 1900).

ing centuries it became æsthetic, treating literature purely as the product of conscious or unconscious art.

It was in Asia Minor that this early criticism had its birth. The Ionians were the first, perhaps, to study Homer systematically. They were, therefore, the first to reject his mythical interpretation of nature in the effort to discover a rational and physical interpretation of it. They inquired, "What is the first principle and source of all things?" and with this inquiry Greek Philosophy begins. Before Pisistratus had undertaken to make a standard edition of the Homeric text, Thales, Anaximander, and Anaximenes, all of Miletus, and Heraclitus of Ephesus, taught the intimate connection between life and matter, the one dependent on the other, according to the doctrine known as Hylozoism. Thus Thales (c. 640 B.C.) believed the first principle to be water, since moisture is necessary to life. Anaximander made the first principle an unknown element to which he gave the name $a\pi \epsilon i \rho o \nu$, from which by eternal motion all things were produced. Anaximenes found the original element to be air, whence came everything through the processes of condensation and rarefaction. On the other hand, Heraclitus (c. 500 B.C.), the last of this so-called Ionian School, taught the immanence in all things of fire, and the doctrine of an eternal flux.

Pythagoras (c. 500 B.C.) was the most remarkable of these earlier philosophers, and it was he who developed

a new form of religion and of philosophy, while he was the first great mathematician to arise among the Greeks. In fact, as early as the seventh century, mathematics began to be studied, (mainly geometry) which the Greeks learned from the Egyptians. Dr. Cajori remarks: 1 "Just as Americans in our time go to Germany to study, so early Greek scholars visited the land of the pyramids. Thales, Œnopides, Pythagoras . . . all sat at the feet of the Egyptian priests for instruction. While Greek culture is, therefore, not primitive, it commands our enthusiastic admiration. The speculative mind of the Greek at once transcended questions pertaining merely to the practical wants of everyday life. It pierced into the ideal relations of things and revelled in the study of science as science." 2

Thales introduced the study of Geometry into Greece and with him begins the study of scientific Astronomy. The attempt to square the circle is as old as Anaxagoras. All of the Ionic philosophers pursued the study of Mathematics. Pythagoras, however, stands alone. Around the life and personality of this great genius there hangs, as it were, a mist of tradition such as envelops all of the most

¹ See Allmann, Greek Geometry from Thales to Euclid (Dublin, 1889); Tannéry, La Géometrie Grecque (Paris, 1887); and Cajori, A History of Elementary Mathematics (New York, 1907).

² An abstract of a history of geometry in Greece, written by Eudemus, is preserved in the commentaries by Proclus (412 A.D.) on the first book of Euclid.

remarkable characters of history, from Moses to Napoleon. Pythagoras was born in the island of Samos, but after visiting Egypt and the East, he finally made his residence at Crotona, in Southern Italy, where he established a cult the members of which, drawn mainly from the aristocratic class, formed a brotherhood under the leadership of Pythagoras. They were bound by a vow to study his theories of religion and philosophy. Three hundred of them formed the highest caste; and they were admitted only by Pythagoras himself, who judged them largely through his knowledge of physiognomy. There was something mystic about all this, for they took an oath of secrecy according to the maxim of their master: "Everything is not to be told to everybody." Pythagoras taught them temperance, self-control, and an ethical righteousness which should make their lives reflect "the music of the spheres," that is to say, the order and harmony of the universe. This principle of harmony ran through all the Pythagorean teaching, which comprised music, arithmetic, geometry, and astronomy. There is a story which tells how he discovered the relations of the musical scale by accidentally observing the various sounds produced by hammers of different weights striking upon an anvil, and suspending by strings other weights equal to those of the respective hammers. He is said to have first discovered the so-called Pons Asinorum in geometry. In Religion he taught the transmigration of souls — a doctrine which he had probably learned in India. The essence of all things is Number, according to his teaching; but no existing works, bearing the name of Pythagoras, are genuine. His influence among the Italian Greeks, and afterwards among the Athenians, was very great; so that the Pythagorean cult endured for many centuries. Finally, in the sixth century, the Eleatic School of philosophy arose, numbering among its most distinguished teachers, Xenophanes, already mentioned as having rejected the Homeric idea of God, with Parmenides and Zeno, both of whom asserted that the senses cannot teach us truth, but that verity is apprehended only by the mind.²

The study of nature, which began with the Ionian School, led to the origin of another science. Homer had long been the basis of geographical knowledge. On his statements, Hesiod and the other early poets had depended. It may be said without exaggeration that interest in geography, so far as it had existed before the middle of the seventh century, was spread among the Greeks entirely through the poems of Homer. The children in the schools, and the elders who heard the declamations of the rhapsodes, thus became acquainted with the cities, rivers,

¹ Gleditsch, Die Pythagoreer (Posen, 1841); Chaignet, Pythagore et la Philosophie Pythagorienne (Paris, 1873). For his so-called Golden Verses, see Göttling's edition of Hesiod (Gotha, 1843); and Schneeberger, Die goldenen Sprüche des Pythagoras (Münnerstadt, 1862).

²Windelband, *History of Ancient Philosophy*, pp. 46-52. English translation (New York, 1899).

and mountains of Greece, and (especially from the Catalogue of Ships) with the names of the Hellenic tribes. But after first-hand knowledge had been gained by travel, learned men began to formulate a more exact view of physical geography, so that with them the science of Geography began. Anaximander of Miletus is said to have made upon a large scale a map of the world as he supposed it to be. His compatriot, Hecatæus (c. 500 B.C.). constructed a bronze plaque or possibly a globe, 2 on which the sphere of the earth, the sea, and the courses of the rivers were given. Maps of countries, however, had not yet become important; though descriptive notes were collected from persons who travelled on business or from curiosity. In this manner the data necessary for the preparation of Descriptive Geography were gradually accumulated. To this the great contributors were Hanno of Carthage, who explored the western coast of Africa, his countryman Himilco, and such of the Greeks as came into direct contact with the Persians and Egyptians.3 Hecatæus corrected the chart of Anaximander, adding a commentary of which fragments are preserved in quotations. This is the first geographical work written by any Greek.

¹ See Bunbury, A History of Ancient Geography (London, 1883).

² χάλκεος πίναξ (Herod. v. 125).

³ See Antichan, Les Grands Voyages de Découvertes des Anciens (Paris, 1891); and infra, pp. 34-35.

⁴ Edited by C. and Th. Müller (Paris, 1841). See the monograph by Schäffer on Hecatæus (Berlin, 1885).

Writers like Anaximander and Hecatæus committed their observations to Prose. Until their time, poetry had been employed even in philosophical discussion — an example followed by Lucretius in later times among the Romans. But descriptive geography cast aside the restraints of metrical form, though still maintaining a highly poetical character. Only by degrees did it become true prose, but was filled with phrases and turns of expression borrowed from the epic writers. Those who employed it were known as Logographi; 1 and presently they began to mingle, with their descriptions of countries, anecdotes and remarks not strictly geographical. In their works, therefore, we find the beginnings of History, which was at first nothing more than annals very simply written. Its true development comes later with Herodotus, who skilfully combined descriptive geography with the story of nations, interwoven also with personal observations, so that he deserves the name which Gräfenhan has given him of "the Humboldt of Antiquity."

Thus it will be seen that out of the study and criticism of Homer there came the elements of many kinds of learning. Homeric study fostered mathematical, geographical, astronomical, and philosophical research, just as it led other poets to write in imitation of their great model. Though Homer gradually ceased to be viewed as a universal teacher, yet the devotion of the Greeks, so

¹ λογογράφοι.

long given to his poetry, exercised an influence which made it endure far beyond the time when he was held to be a wholly inspired writer. His great lines had become a part of every man's intellectual equipment. His phrases, his epithets, his many gnomic utterances, were as firmly embedded in the daily speech of the Greeks, as those of the English Bible and of Shakespeare are embedded in our own. In the study of him we are to find the sources of Greek learning. Afterward, while forsaking him as a guide in morals and in science, men still turned to him as a great master of language and an unconscious model of strong yet harmonious expression.

[BIBLIOGRAPHY. — In addition to the works cited in the preceding chapter, see also Gräfenhan, Geschichte der Classischen Philologie, i (Bonn, 1843); Reinach, Manuel de Philologie Classique, 2d ed. 2 vols. (Paris, 1885); Egger, Essai sur l'Histoire de la Critique chez les Grecs (Paris, 1887); Sandys, A History of Classical Scholarship, i. pp. 1-51, 2d ed. (Cambridge, 1908); Jebb, Homer (Glasgow, 1887); Schömann, Griechische Alterthümer, 4th ed. (Berlin, 1897); Browne, Handbook of Homeric Study (London, 1905); Cara, Gli Hethei Pelasgi (Rome, 1902); E. Curtius, History of Greece, Eng. trans., 5 vols. (New York, 1868-1872); Mahaffy, What have the Greeks done for Modern Civilisation? (New York and London, 1909).]

II

THE PRÆ-ALEXANDRIAN PERIOD

(500-322 B.C.)

THROUGHOUT the sixth and seventh centuries, supremacy in Greek culture had been held by the Ionians of Asia Minor. To them were due the intellectual efforts which have been described in the preceding chapter. Hellas proper, however, both Athens and Sparta had achieved a prominence which was full of latent possibilities. The wise and temperate rule of Solon and Pisistratus in Athens, and the institutions which at Sparta were ascribed traditionally to Lycurgus, had fitted each of these States to play the important rôles by which they are best known in history. Athens and Sparta were different in almost every respect. Athens was democratic, brilliant, and given first of all to intellectual activity. Sparta was aristocratic, subjected to a strict discipline, and caring first of all for warlike power.1 These two States had been gradually acquiring control over the territories which touched their own; so that in the sixth century they became possessed of a civilisation based

¹ See Jannet, Les Institutions Sociales . . . à Sparte, 2d ed. (Paris, 1880).

upon strength of body and mind, and ripe for the further cultivation which was to be developed in them.

It was in the year 500, that a darkly threatening cloud began to loom over the Greeks of Asia Minor. Their proximity to Persia had always been a danger. Loving liberty, they gradually resented the burden of a despotism which the Persians fostered by imposing petty tyrants upon communities which had been wholly free. the year 500, their smouldering discontent broke out into a flame. There was a general uprising of the Ionian cities. A republic was proclaimed in Miletus. Soon the cities on the Hellespont and almost the whole of Caria and Cyprus joined in a revolt. An appeal for help was made to the Western Greeks; and though Athens and Eretria were the only States to give immediate aid by sending a small fleet, this marked the beginning of the great Persian Wars which constitute an epoch in the history of Greece and of the world. For the moment, the Ionian fleet was shattered by the Persian allies from Egypt and Phœnicia. Miletus, after a siege of six years (500-404 B.C.), was taken and destroyed in the madness of a frightful vengeance. The whole of Ionia was ravaged with oriental cruelty. It was then that Athens stood forth as the champion of the race; and against her Darius, "the great king," launched two vast expeditions of ships and men. The first was wrecked at Athos. The second came to a disastrous end on the plain of Marathon (490 B.C.). One hundred thousand Persians under Datis and Artaphernes were pitted there against ten thousand Athenians under Miltiades. The Asiatics were routed with great loss, and the Athenian victory sent a thrill of triumph throughout all Hellas.

Modern historians believe that the exploit of the Athenians was greatly exaggerated then, and that it has been misunderstood ever since. Professor K. F. Geldner says, "Probably the Greeks, after having avoided battle for a long time, fell upon the Persians as they were departing, and especially after their powerful cavalry had already embarked." 1 If the able and energetic Darius had commanded in person, the result would doubtless have been different. Making all allowances, however, it was in effect a victory for Athens, since the Persians abandoned the campaign and returned to Asia. Therefore, Athens leaped at once to a position of great influence which was enhanced when, ten years later, the new Persian king, Xerxes, sought vengeance. An enormous army under his command marched through Macedonia and Thrace, and an overwhelming fleet sailed forth to Thessalonica. The Spartans, who now rushed to arms, suffered the glorious defeat of Thermopylæ. The Athenian fleet routed the Persians off Salamis; while both Athenians and Spartans united in shattering the disordered troops of Persia behind their fortifications at Platæa.

¹ See also Schauer, Die Schlacht bei Marathon (Berlin, 1893).

the Ionians, on the same day, being encouraged by the sight of Grecian ships, shook off once more the shackles of their servitude and destroyed the sixty thousand men who remained out of the great host that had been led forth by Xerxes.¹

The two Persian Wars may seem to have had no direct relation to the history of Classical Philology; yet in fact, by compelling the Greeks to put forth all their power, these splendid triumphs stimulated them into extraordinary activity wherever the race was represented.² Such a stimulation is the result of every great war, and it may well serve as a vindication of many historic struggles which have cost so heavily in human life and in apparently wasted treasure. The Punic Wars led at Rome to the first real flowering of Italian genius. The Civil Wars which ravaged Italy in a later century ended with the golden triumphs of the Augustan Age. France was never so glorious, intellectually, as in the battle-years under Louis XIV, and again amid the Napoleonic Wars. The heroic struggle of England against Spain made the Elizabethan Period superbly memorable in the annals of literature and science; and so did her stubborn, unrelenting contest with

¹ See Cox, The Greeks and the Persians (New York, 1897).

² Note, for example, the remarkable activity displayed by the Athenians in rebuilding and enlarging their city's walls. Men of every station, women, and even children, under the urgent advice of the mighty Themistocles, engaged in this work, tearing down temples and even tombs to afford material for the walls.

the Corsican Emperor, when at times she stood entirely alone, with a haughty confidence in her ultimate success. Warfare on a great scale brings into play all the energies of men, both physical and mental. It inspires them alike by its victories and by its defeats. It leads nations to cast aside their inglorious love of ease and lets the fierce joy of conflict stir at once the senses, the intellect, and the imagination.

Hence it is that we find in the Persian Wars the beginning of a great and splendid career for the Hellenic States, and most of all for Athens, which had won such brilliant victories in the field as to rouse Hellenic pride and to make the city of the violet crown the centre of all Hellas, in arts as well as arms. We must now look for the rise of men who were really great, and for the development of those studies which had been only nebulously visible in the two preceding centuries. Certain of the men who became famous early in this period, which extends from the outbreak of the Persian Wars to the death of Aristotle, won their chief distinction through the inspiration which had come to them because of the Persian assault on Greece. Conspicuous among these was the Theban Pindar, greatest of all the lyric poets. The Thebans were jealous of Athens; yet Pindar was no local poet, but the laureate of the whole Hellenic race; and his exultation over the defeat of the Persians led him to pour forth vivid, joyous lines, ringing with the note of patriotic

pride. Because of this, his fellow-Thebans imposed on him a heavy fine, which the Athenians paid back to him twofold besides erecting a statue in his honour.

The mention of Pindar leads us to note that Lyric Poetry was first cultivated with conscious art among the Æolians and the Dorians. The lyric in general is the most primitive form of poetry, and it must have existed in the earliest ages, at least in a rude form, for it is the spontaneous utterance of emotion - at first absolutely individual self-expression, a concomitant of the primitive dance, a vocal expression of the "play instinct," seeking naturally after rhythmic movement.1 This originally expressed itself in the trochaic measure, which is the primitive metrical form among all peoples. Then was developed very gradually the dactylic hexameter which we find in Homer. Side by side with this hexameter, however, the lighter lyrical movement was cultivated in song. Elegiac and Iambic Poetry forms a transition from epic to lyric composition, and was so known to the Ionians. Purely lyrical or Melic Poetry, which was verse intended to be sung to a musical accompaniment, was not Ionic, but first received artistic shape from Terpander of Antissa in Lesbos as early as 700 B.C. In the Æolic lyric, Alcæus of Mitylene (later imitated by Horace), and his contemporary, Sappho, gave it a complete and varied form. So the jovial poems

¹ See W. Scherer, *Poetik* (Berlin, 1888); and Peck, *Literature* (New York, 1908).

of Anacreon (550 B.C.) were composed earlier than Pindar's time. Yet it was Pindar, a Dorian, who raised choral poetry to its highest form at the time of the Persian Wars, together with Simonides and his nephew, Bacchylides.¹

The splendid victories of Hellas over its eastern foes led Herodotus of Halicarnassus in Asia Minor to write his remarkable narrative in nine books at a date which is uncertain, but which must have been about the middle of the fifth century B.C. Herodotus, a great traveller, a keen observer, a collector of interesting facts, has been styled "the Father of History." We have seen, however, that history of a sort had been written by the Logographi.² It was Herodotus who cast aside the dry annalistic form and wrote in a prose style that is at once simple, attractive, and highly picturesque, for it retains a deep tinge of poetic colouring. This genial, learned, and yet pleasing writer took for the subject of his history the Persian Wars. It is, indeed, a great prose epic of the conflict between Hellas and the East, as the first sentence of the first book shows:-

"This is a publication of the researches of Herodotus of Halicarnassus, to the end that the deeds of men may not be obliterated by time, and that the great and won-

¹ See Mattel, *Die griechischen Lyriker* (Berlin, 1892); and the introduction to Smyth's *Greek Melic Poets* (New York, 1900).

² See p. 26.

derful achievements wrought both by Greeks and by barbarians may not be divested of their glory — and, moreover, to explain the cause which led them to wage war upon each other."

Contemporary with Herodotus was Hellanicus of Mitylene, of whose works only fragments remain. Though he lived to a very old age, dying in 406 B.C., he had none of the literary charm of the new prose. Nevertheless, he was the first writer to introduce something like a chronological arrangement into the traditional records of history and mythology; and his views regarding them were accepted for more than a century after his death. He likewise was a profound student of Genealogy. His records, though having little literary value, were of much service to the later historians; while the notes of Herodotus made during his extensive travels were a rich mine for writers on Descriptive Geography.

Just as the Persian Wars had given Herodotus a theme, so the Peloponnesian War (431-404 B.C.) inspired the greatest historian who has ever written. This was Thucydides (471-c. 399 B.C.), an Athenian who wrote a history of this epoch-making struggle waged between the two leading States of Hellas for the supremacy of the race,—Athens and her allies on the one side, and Sparta and her allies on the other. Thucydides was a man of wealth and character. His fine intellect had been cultivated until it became an instrument of remarkable power, delicacy, and

finish. He had on the one hand the scientific spirit, and on the other hand an almost unrivalled gift of literary expression. When the war broke out, he was forty years of age, with all his faculties at their very highest; and thus, most naturally, the history which he produced in eight books 1 has become what he desired it to be, a possession for all time $(\kappa \tau \hat{\eta} \mu a \ \hat{\epsilon} s \ \hat{\alpha} \epsilon \hat{\iota})$. Herodotus had written with great charm of style. His narrative was illumined by anecdote and the narration of curious facts. He was a prose poet. Thucydides, on the other hand, combined judicial impartiality with a manly, moving eloquence. Lord Macaulay said that his prose was the finest prose that has ever yet been written by any man;² and this in spite of what to the modern mind seems often to be extreme obscurity. His impartiality is the more remarkable in that he was writing contemporaneous history, and that he was himself an Athenian and took part in the war. To quote Dr. F. B. Jevons: "There is hardly a literary production of which posterity has entertained a more uniformly favourable estimate than the history of Thucydides. This high distinction he owes to his undeviating fidelity and impartiality as a narrator; to the masterly concentration of his work, in which he

¹The eighth book is incomplete and is by some regarded as not the work of Thucydides himself.

² Macaulay also said of himself that while he might perhaps dare to believe that he could equal the prose of any other writer, he would never attempt to rival the seventh book of Thucydides.

is content to give in a few simple yet vivid expressions the facts which it must have often taken him weeks or even months to collect, sift, and decide upon; to the sagacity of his political and moral observations in which he shows the keenest insight into the springs of human action and the mental nature of man; and to his unrivalled descriptive power. . . . Thucydides when he undertook to record the present, thereby deliberately elected to confine himself to efficient causes. This preference for efficient causes and for scientific history, in the best sense of the term, is intimately connected with the positive nature of his history—that is to say, with his perpetual endeavour to record facts and to distinguish them from inferences drawn from facts."

The utmost efforts of modern criticism have been unable to shake the wonderful structure of his history. In this respect he is to be compared with Gibbon. It is interesting to note that while Niebuhr is popularly said to have first established the scientific principles of historical investigation, Gibbon anticipated Niebuhr in practice just as he himself had been anticipated by Thucydides more than two thousand years before.¹

A contemporary of Thucydides, Xenophon, who was

¹ See Müller-Strübing in the Jahrbuch für Philologie, cxxxi. 289 foll.; and Classen's Introduction to his edition of Thucydides, vol. i. 2d ed. (Berlin, 1897); Forbes, The Life and Method of Thucydides (London, 1895); and Jevons, A History of Greek Literature, pp. 327-348 (New York, 1897).

also an Athenian, is the third great historian to give lustre to the Præ-Alexandrian Period. Serving as a mercenary in a Greek force raised by Cyrus the Persian, he recorded his experiences in the Anabasis, a work which continues to be read in our secondary schools both for the simplicity and vivacity of its narrative, and for the facts observed by Xenophon and faithfully recorded in the seven books which make up the work. Xenophon as an historian is inferior to Herodotus and Thucydides, but he is an admirable writer, as his persistent popularity well shows. Besides the Anabasis, he wrote a history of Greece (Hellenica) which practically completed the unfinished work of Thucydides, unlike whom he wrote with a strong bias, in violent contrast with the stern impartiality of his predecessor. Xenophon did not confine himself to historical writing, but composed treatises which had to do with Political Science (the Lacedamonian Polity, the Cyropædia, and On the Athenian Finances) as well as quasi-ethical monographs, the most famous of which is the Memorabilia of Socrates. Xenophon writes in a dialect which is not purely Attic, owing to the fact of his long and frequent absences from his native country.2

In the histories of Thucydides and Xenophon there are introduced set speeches, conventionally supposed to have been delivered by generals to their troops, by statesmen

¹ See A. Holm, Griechische Geschichte; Eng. trans. (London, 1804-00).

² See Alfred Croiset, Xénophon, son Caractère et son Talent (Paris, 1873).

to deliberative assemblies, by ambassadors and by demagogues. These speeches do not pretend to be authentic records. They are inserted partly to enliven the narrative by interspersing it with personal touches, and more particularly to sum up effectively and within a short compass the opinions or arguments which the speakers might have been supposed to hold and to utter. They are true in substance though not authentic in form. Their occurrence in historical writing shows that, during the fifth century, Oratory had become an art. Of course, a certain kind of oratory, rude and extemporaneous, must have been known far back in the prehistoric period, since oratory is one of the accomplishments which make for statesmanship. The primitive chieftain undoubtedly harangued his followers when occasion arose. Even in the poetry of Homer there are speeches set down in hexameter verse. But this untutored oratory was, as Professor Sears describes it, merely "protoplasmic eloquence." The psychological basis of it was not understood. The graces of external form were not yet taught by precept. Such power as oratory had, came from strong feeling and the gift which some possess of swaying the minds and imaginations of their hearers by communicating to them something of their own passion. By the end of the sixth century, however, educated men began to recognise that the gift of eloquence, the end of which is persuasion, could be acquired; so that in a philosophical treatise by

Diogenes of Apollonia there is found embodied, "like a trilobite in limestone," the following rhetorical injunction, "It appears to me that every one who begins a discourse ought to state the subject with distinctness, and to make the style simple and dignified." In fact, the Greeks, who were essentially a nation of talkers, expected the account of a man's actions to be accompanied and explained by his spoken words, so that all might judge of his intellectual and moral character. Hence it was that at the time of the Persian Wars, eloquence came to be highly valued as indispensable to the statesman, the diplomat, and the commander of armies. Oratory, or, to use the Greek term, Rhetoric (ἡητορική), thus arose, comprising both the practical and the theoretical art of speaking. So earnestly was it cultivated that it came to be called at last "the art of arts." Its development was one of the steps which accompanied the decline of poetry and the rise of prose. Just as the lyric supplanted the epic, and picturesque prose narrative was gradually preferred to poetry, so oratory — a still further remove from purely imaginative composition — helped to assimilate literature with practical life. Its rapid growth was due, of course, to the spread of democracy by which the government of the State became the gift of the assembled people. To dominate the reason, the impulses, and the prejudices of the people were at last the chief functions of the art of oratory.

¹ See Sears, The History of Oratory, ch. i. (Chicago, 1903).

Already for the training of legal and judicial pleading, a definite though imperfect system had been set forth. Cicero 1 ascribes it to the Sicilian Greeks, who were famous in antiquity for their ready wit, their love of highly coloured language, and their passion for subtle argument. The first manual professing to instruct men in the art of persuasive speaking is said to have been written by Corax of Syracuse in Sicily early in the sixth century B.C. With this date then begins the formal development of the art of Rhetoric. Corax opened a school at Syracuse in which he taught the principles laid down in his $T\acute{e}\chi\nu\eta$; and his pupil, Tisias, of whom little is known, made some additions to the rules of Corax.2 Gorgias of Leontini (485-380 B.C.), probably a pupil of Tisias, carried the study of rhetoric to Hellas proper, whither he went as an ambassador to ask for protection against the encroachments of Syracuse. From that time he had a residence in Athens and another in the city of Larissa in Thessaly, winning widespread fame both as a public speaker and as a practical teacher of rhetoric. So far as any evidences remain of the teaching of Gorgias, it seems plain that his rules looked to a highly artificial and meretricious style of oratory.3

¹ Brutus, 46.

² These rules divided an oration into five parts: (r) proem, (2) narrative, (3) arguments, (4) subsidiary remarks, and (5) peroration. Both Corax and Tisias made much of the value of what they called elkos, that is to say, the semblance to truth which in an oration makes the whole of an argument appear plausible and therefore possesses an appeal to man's sense of what is just and right.

³ Two orations ascribed to him are extant. See Blass, pp. 44-72.

Studied antitheses, a profusion of simile and metaphor, apostrophe, and other figures, together with a carefully balanced rhythm, must have made his most finished eloquence resemble the so-called Euphuism of John Lyly and his fellow-Elizabethans. It was, in fact, a foreshadowing in Greece of the so-called Asiatic style of eloquence adopted in later times by some of the Roman orators. At Athens, however, a less affected mode of eloquence prevailed. There were great orators who were conspicuous during the middle of the fifth century B.C., and whose manly, noble eloquence (the Attic style) gained little from teachings such as those of Gorgias.

The Age of Pericles—the noblest statesman whom Greece produced—was a period of great splendour. Pericles adorned and enriched the city with the wealth contributed by the allied States. Athens to him meant Greece just as Paris to the French people has long meant France. Under his patronage, Greek architecture and sculpture reached perfection. He planned the Parthenon, the Erechtheum, the Odeon, and many like magnificent public edifices. He encouraged literature as well as the other arts. He was the centre of a splendid group, in which were Thucydides, Æschylus, Sophocles, Euripides, Anaxagoras, Zeno, Protagoras, Pindar, and the great sculptors Phidias and Myron. Athens was brilliant with gorgeous festivals and crowned with the laurels of military glory. The noblest figure of all was Pericles himself.

Though Thucydides opposed him, he generously records the fact that Pericles never did anything unworthy of his high position, that he neither flattered the people nor oppressed his private enemies, and that with all his unlimited command of public money, he was personally incorruptible.1 Gorgias is said to have instructed both Pericles and Thucydides, but the first Athenian to apply the rules of rhetoric practically in speaking before the public assemblies and the courts was Antiphon (480-411 B.C.). He was also the first to publish speeches as models for rhetorical study. If we examine these and the orations interwoven in the history of Thucydides, we find that they exhibit a certain self-consciousness which is fatal to effective oratory. Lysias (458-c. 378 B.C.) shows purity of style and grace, though he is lacking in energy. Isocrates (436-338 B.C.) is rightly regarded as the father of artistic oratory, properly so called, and by his mastery of style he has influenced oratorical diction throughout all succeeding ages.²

¹ Lloyd, The Age of Pericles, 2 vols. (London, 1875); and Abbott, Pericles (London, 1891).

² Isocrates (Milton's "Old Man Eloquent" and Cicero's "Father of Eloquence") was perhaps as well known for his rhetorical teaching as for his practical application of it. He wrote speeches to be delivered by others, and he gave instruction at the rate of 1000 drachmæ, or about \$250, for a course of lessons, and he often had a hundred pupils at a time, yielding a revenue equivalent to \$25,000. The king of Cyprus paid him 20 talents (about \$22,000) for a single oration. These set speeches were not merely delivered once, but were copied and read wherever Greek was understood. On the other hand, he would sometimes spend from five to ten years in perfecting one of these show pieces.

He spoke with ease, adapting the language of the people to his own usage; his periods were flowing and rhythmical; and he had an instinctive knowledge of everything which tends to the possibilities of harmonious language. It is said that Cicero was a deep student of Isocrates.¹

It was not until near the close of the Præ-Alexandrian Period that the most magnificent representative of Greek oratory arose in the person of Demosthenes. He combined the persuasiveness of Lysias, the animation and boldness of Thucydides, and he understood well the art of speaking in short, terse sentences which would go home like arrows to the minds of an assembled multitude. His superb oration On the Crown shows not only an absolute mastery of all the resources of rhetoric employed with great intellectual power, but also patriotic fervour and that sincerity which belongs essentially to the elads upon which Corax had insisted.²

So much of the teaching in Greece was given orally that we may perhaps find in this circumstance an explanation as to why the oldest rhetorical text-book now in existence belongs to the middle of the fourth century B.C. Corax, already mentioned, had merely discussed the divisions of an oration and the manner of presenting its arguments. In the manual written by Anaximenes (who, by the way, wrote nine books of criticism on Homer), the

¹ See Blass, Attische Beredsamkeit, 2d ed., 3 vols. (Leipzig, 1898); and Jebb, Attic Orators, ii. pp. 1-34, 2d ed. (London, 1893).

² See Butcher, Demosthenes, preface to last ed. (London, 1903).

subject is treated practically rather than philosophically. Anaximenes taught rhetoric to Alexander the Great, who for his sake spared the city of Lampsacus, though it had sided with the Persians. This manual, which is dedicated to Alexander, was, until the last century, included among the works of Aristotle and generally ascribed to him, though with considerable doubt. In 1828, L. Spengel in his treatise on the rhetorical writers prior to Aristotle 1 conclusively proved the work to be that of Anaximenes. The author divides oratorical discussion into three categories: (1) Forensic, (2) Deliberative, (3) Declamatory. This threefold division was accepted by the ancients from that time. The manual gives excellent advice as to the proper arrangement of the members of an oration, with some further technical details. The book, however, is brief and its treatment of the subject very meagre.

The first scientific treatise with a full analysis and a comprehensive grasp of both theory and practice is that of Aristotle in his *Rhetorica*, divided into three parts or books. As this is the most important work on rhetoric produced in ancient times, a short account of its plan and development may be given here. The great point of departure in Aristotle's discussion of rhetoric is found in his view of its functions. Rhetoric to him is not the art of ornamenting and beautifying discourse. It is not merely persuasion. It is rather the discovery of the

¹ Published at Stuttgart, 1828.

possible means of persuasion. Hence, rhetoric is the counterpart of Logic, and the principles of logic enter into its laws as an essential part of them. The uses of rhetoric are: (1) the means by which truth and justice may rise superior to falsehood and injustice; (2) the means of persuasion that are suited to popular assemblies; (3) the means of seeing both sides of a case and of thus discovering the weakness of an adversary's argument; and (4) the means of defending one's own case against all possible attacks that can be made upon it. The means of persuasion he sets forth as follows: (1) natural, "inartificial" proofs, such as the sworn testimony of witnesses, documents, etc.; and (2) artificial proofs, which are either (a) logical, involving demonstration by argument; or else (b) ethical, when the weight of a speaker's own character inspires confidence in his hearers, and emotional, when he works upon the feelings of his listeners by appealing to their sympathies or prejudices. Logical proof, he says, depends upon the principle of giving "a syllogism from probability." Of the nature of such syllogisms he distinguishes the common topic or general head, applicable to all subjects, and the special topic drawn from special arts, gifts, or circumstances.

Following a division of Anaximenes, rhetoric was divided into three kinds: (1) Deliberative Rhetoric, which has to do with exhortation or persuasion and is concerned with future time as to expediency or inexpediency; (2) Fo-

rensic Rhetoric, relating to accusation or defence and concerned with time past as to justice or injustice; and (3) Epideictic Rhetoric, relating to eulogy or censure, and usually concerned with the present time and as to honour or distress. The first two books of Aristotle's rhetoric deal with invention, *i.e.* the discovery of the means of persuasion. The third book relates to expression and arrangement. Under the latter head he treats of the art of delivery, considering verbal expression in which is included the use of metaphor, simile, and terse gnomic sayings, of the rhythm of sentences, and of Style. As to style he notes four varieties: (1) the purely literary, (2) the controversial, (3) the political, and (4) the forensic.

Aristotle's *Rhetoric* is the most exhaustive, analytical, and scientific treatise on the subject that has ever been written. It is, however, as has been truly said, the philosophy of rhetoric rather than rhetoric that he discusses. His mind was intensely analytical and was always seeking for ultimate causes; so that even in this field he is forever verging upon the sphere of the metaphysical. The great importance of the treatise is that it prepared the way for Aristotle's Dialectic or Logic, which in turn furnished many of the distinctions and classifications, destined afterward to be used in a different relation by the originators of Formal Grammar.

Aristotle himself regarded rhetoric as standing side by side with logic, since each relates to the process of insur-

ing conviction. The orator must be a dialectician if he would reach the highest excellence in his art; and the dialectician, on the other hand, will make his logic most effective through a command of the arts of oratory. Hence Aristotle's rhetoric is really a dialectic science. In his Organon, after he has set forth his system of logic, he develops the methods by which man arrives at knowledge. He discloses the laws of thinking and the modes of cognition from a study of man's faculty of cognition, striving to gain an insight into the nature and formation of evidence and conclusion. In the course of this inquiry he tries to classify all possible objects of human knowledge under definite heads. In so doing, he drew up his famous ten Categories (prædicamenta). These are: (1) substance, (2) quantity, (3) quality, (4) relation, (5) place, (6) time, (7) situation, (8) possession, (9) action, (10) suffering, that is to say, passivity.1 The mere enumeration of these categories serves to show how intimately they are connected with the classification that we find in our formal grammar. Because, in setting them forth, Aristotle provided a terminology and a framework for the Alexandrian and other grammarians in the following period, he has been spoken of as the source in which both criticism and grammar find their origin.2

¹ These ten categories are really reducible to two: (1) substance, (2) attribute; or (1) being, (2) accident.

² Dio Cassius, liii. p. 353; Reiske (294 R). Aristotle's Rhetoric is edited separately with notes by Cope and Sandys, 3 vols. (Cambridge,

Rhetoric, language study, criticism, literary training, and philosophy were all popularised by a class of teachers who became famous under the name of Sophists (σοφισταί). Originally the name Sophist was given to any one who professed a particular knowledge of some special subject; but about 450 B.C. it was primarily applied to welleducated men who had the gift of ready speech and who travelled from place to place lecturing and teaching in return for a tuition fee. They were the middlemen of learning and made intelligible to untrained minds a good deal of what was set forth more profoundly by original writers and thinkers. They have their counterpart in the peripatetic lecturers who traversed the United States from 1830 to 1860, making addresses before "lyceums," and in the university extension teachers of the last two decades. Some of them were men of great ability, such as Gorgias of Leontini, already mentioned; and Protagoras, a brilliant teacher of rhetoric in Athens, who was the first scientific individualist, taking as his motto "Man is the measure of all things," that is to say, every man must be his own standard of truth, since truth is only relative and not absolute. There was also Prodicus of Ceos, who lectured on literary style (ὀρθοέπεια), laying great stress on the right

^{1877);} and Zeller, Aristotle (London, 1897). On the rhetoric of the Greeks, see Gros, Étude sur la Rhétorique chez les Grecques (Paris, 1835); Perrot, Les Précurseurs de Démosthène (Paris, 1873); Girard, Études sur l'Éloquence (Paris, 1847); and Bascom, The Philosophy of Rhetoric (New York, 1888).

use of words (le mot juste). Hippias of Elis was another famous Sophist. He was a man of prodigious memory and profoundly versed in all the learning of the day, so that he attempted literature in every form that had so far been developed. He piqued and rather shocked his audiences by attempting to prove that law is an evil and should not be obeyed, since it forces man to do many things which are contrary to his nature. In this he was one of the first representatives of what the higher slang of our day describes as "the artistic temperament."

Such Sophists as these — brilliant, versatile, eloquent, and ingenious — had an immense influence on popular thought. Their society was courted by the leading men of Athens. Even Pericles took pleasure in their conversation. Greatest of them all was Socrates, though he professed to despise the Sophists as a class and believed himself to be other than a Sophist because he took no money for his teachings, which were given in a desultory, conversational fashion. From Protagoras and Gorgias and Hippias, the Skeptics derived their doctrines; but Socrates stands forth as the most inspiring philosophical teacher of any time. From his immensely suggestive talk, Plato drew his inspiration, as did Aristotle from Plato. Socrates gave an entirely new turn to philosophic teaching. Before his time philosophy had been physical; after Socrates it became metaphysical and ethical. Tust as the early Ionians had sought for a material origin of the universe, so Socrates thrust aside all speculations of the kind and asked the epoch-making question, "How shall man live?" The answer to this question was sought not merely by Plato and by Aristotle, but afterwards by the Epicureans and the Stoics, the Cynics and the Eclectics.

It should be remembered, however, that, on the whole, the Sophists as a class were rightly held in disesteem. The majority of them were mere smatterers, glib and shallow, perverting the truth, and willing for a price to make the worse appear the better reason. In the end, the later Sophists were nothing but smooth talkers, sometimes delighting in mere technicalities, which took with them the place of reason, so that they fell wholly into ill repute. But it was the Sophists of the fifth century who gave a special impulse to the theoretical study of language. Remembering the importance of rhetoric and the quasiphilosophical principles of men such as Protagoras and Hippias, it is not strange that there should have arisen an immense amount of discussion regarding language, from the desire to discover the laws of thought through a discovery of the laws which govern the expression of that thought in human speech.

The fact that Language Study began as an adjunct to the study of philosophy is immensely important as explaining two interesting facts,—the fact that the pur-

¹ On the Sophists, see Benn, *Greek Philosophers*, ch. ii. (London, 1883); Schanz, *Die Sophisten* (Göttingen, 1867); and Ueberweg, *Geschichte der Philosophie*, i. 9th ed. (Leipzig, 1907).

suit was conducted in a way so unlike that of the scientific linguist; and the other fact that a long time elapsed before the development of scientific grammar. The philosophers were at first concerned only with the meanings of words, and very little with their forms, their external relations to each other, or their arrangement and government in a sentence. They strove rather to dig down into the very heart of language, to find out what lay behind the sounds, and to penetrate into the working of the minds that gave them currency. Why was a certain combination of letters the representation of one idea, while a certain combination of other letters stood for the representation of a different idea? In general, what was the relation of sound to thought? These questions and others like them first attracted the philosopher to the study of language, while they are the very last and most remote problems to interest the modern scientific linguist. Hence, if the ancients had begun to investigate language for its own sake, they would have created Grammar; but as they took up the subject merely as a means to another end and from the standpoint of psychology, they invented Etymology.

It is, of course, to be understood also that even the most enlightened of the Greeks in their most earnest researches never went beyond the study of their own language. They scarcely even recognised the speech of other peoples as entitled to be called language at all.

The Hellenic contempt for the non-Hellenic is nowhere more strikingly displayed than here. To the Greeks all foreigners, and even their own kindred who spoke unfamiliar dialects, were styled "dumb" (ἄγλωσσοι). The contemptuous term $\beta \acute{a}\rho \beta a\rho os$ is merely another expression of the same feeling. It was only the Greeks who talked. Other people chattered like the birds of the air, or jabbered like the beasts of the forest. Thus the Carians, the Thracians, the Illyrians, the Phrygians, and even the Macedonians were said to speak "barbarian" tongues.1 Demosthenes called Alexander the Great a "barbarian." This feeling also operated in keeping back the development of grammar in its modern sense. As a rule, no Greek studied foreign languages. His own tongue he learned in childhood and he felt no need of instruction in that. As for the jargon of alien races, he despised both them and those who spoke them. Themistocles, who is said to have spoken Persian very fluently, stands out as a conspicuous exception. For a long time there were no language teachers and no study of language from the standpoint of formal grammar. Persons who in ancient times acted as interpreters between Greeks and non-Greeks were either children of mixed parentage, speaking both their fathers' and their mothers' tongue; or else they were foreigners who studied Greek for the express purpose of serving as interpreters. There was, indeed, a steady demand for the services of

¹ Strabo, vii. 321; xiv. 662.

such men. Herodotus nowhere implies even in the remotest way that he knew any of the languages spoken in the many countries that he visited. In one passage 1 he speaks of caravans of merchants in the region of the Volga as needing seven interpreters (ἐρμηνεῖς) speaking seven languages. At a very much later period, when Alexander the Great penetrated India and questioned the Brahmins on the subject of their religion, the conversation had to be carried on through a series of interpreters. The Greeks, in fact, displayed an amusing naïveté in their astonishment at finding so many people who knew no Greek, but who spoke barbarian tongues with so much ease. They were, in fact, apparently not gifted as practical linguists; for even after Latin was the language of their own rulers, they seldom learned to speak it well. Thus Plutarch says 2 that he found it impossible to master Latin, and that one needs to begin its study when very young. Strabo notes that historical treatises composed in foreign languages were inaccessible to the Greeks and never read by them.3

On the other hand, at an early period there is mention of foreign scholars and writers who acquired an excellent command of Greek, men like Berosus the Babylonian (in the fourth century B.C.) and Manetho the Egyptian, who wrote in Greek the records of their respective countries—annals

¹ Herodotus, iv. 24.

² Plutarch, Demosth. 2.

³ Strabo, ii. 4, 19.

which the Greeks regarded with a supercilious indifference. There is absolutely no hint in any ancient writer that any of these foreign languages might be related to the Hellenic dialects. The idea would have seemed preposterous even to the most enlightened Greek. The nearest approach to the suggestion of such an idea is found in Plato's dialogue, the Cratylus, where Socrates notes the similarity between the Greek and Phrygian names for certain common objects. But though Plato is evidently here upon the verge of a discovery that was made only in the last century, he failed to see the importance of the fact which he had set down, and chose rather to account for it on the theory that the Greeks had borrowed a few words from the Phrygians. That his own language and that of a "barbarian" people had a common source seems never to have occurred to him; nor did so keen an observer as Aristotle perceive in languages "the law and order which he tried to discover in every realm of nature." Hence, it came about that, as the Greeks were naturally slow in acquiring foreign tongues, as they had a supreme contempt for other languages than their own, and as they entered on the investigation of the subject from a purely philosophical and psychological point of view, the first stage of language study reached by them was the theoretical rather than the empirical.

The Greek word $\lambda \delta \gamma \sigma s$ means at once the spoken word, and the reason which prompts the utterance of that word.

This duality of meaning both symbolises and illustrates the spirit in which the Greek philosophers approached the study of language. They wished to determine (1) whether the word and the thought had a necessary relation; and if so, (2) what that relation was. Naturally enough, two opposing views were soon formulated by two philosophical schools. The Heracliteans believed that because all truth is derived from language, language rests upon an immutable basis. Words are either perfect expressions of things or else they are only inarticulate sounds. That is to say, a name must be either a true name or it is no name at all. Between every name, therefore, and the thing which it signifies, there is a natural harmony by virtue of which each word in itself inevitably expresses the innermost nature of the thing named. The Heracliteans thus held that language arose by nature (φύσει or $\nu \delta \mu \varphi$). The Eleatics,² on the other hand, regarded words as given to things arbitrarily; that the names of things, like the names of slaves, might be altered at pleasure; and that, in consequence, no light is to be thrown on mental processes or on the nature of thought, by studying the forms in which it is expressed. One of the Eleatics, a Megarian, Diodorus, named his slaves after the conjunctions, thinking to show thereby the absurdity of the Heraclitean doctrine, — which recalls Dr. Johnson's

¹ I.e. the followers of Heraclitus of Ephesus, about 500 B.C.

² I.e. the followers of Xenophanes and Parmenides of Elea.

famous refutation of Berkeley's idealism. Language, therefore, according to the Eleatics, arose by convention $(\theta \acute{e} \sigma \epsilon \iota \text{ or } \sigma \nu \nu \theta \eta \kappa \acute{\eta})$.

This controversy has an interest far greater than any merely linguistic discussion could possess. It really strikes down into the most profound recesses of the human mind. It grazes the borderland of a philosophical question that has puzzled metaphysicians ever since men began to reflect upon the mystery of their being, — a question that has never been solved and that, humanly speaking, admits of no solution. It is the question which in the scholastic period of the Middle Ages was known as the question of Realism and Nominalism. It is the question which, in after times, appeared as the question of the Freedom of the Human Will. Its discussion by the ancient philosophers led to the investigation of language. As it was claimed that language corresponds naturally and inevitably to the thought, just as sensation corresponds to the object which excites it, the first inquiry which philosophers set before themselves was this: What is language?

Heraclitus asserted that language is the immediate product of a natural power which assigns to each thing its proper designation as a necessary element of the thing's existence. Names, he said, are like the *natural*, not the *artificial* images of visible things, *i.e.* they resemble the shadows cast by solid objects, the images seen in mirrors,

the reflected sun in still water. "Those who use the true word do really and truly name the object, while those who do not, merely make an unmeaning noise." That is, words are the immediate copies of things, produced by nature herself, not due to any subjective influence or human caprice, but corresponding to realities by objective necessity; they have an abstract propriety and fitness $(\partial\rho\theta\delta\tau\eta s)$ and an intrinsic force and meaning. This is the extreme statement of the Heraclitean doctrine which was afterward modified by Epicurus so as to make the objective necessity, referred to above, a physical, organic necessity.

Against the Heracliteans, the Eleatics defended their thesis that names are given and were always given arbitrarily by men who might with perfect propriety change them about. Democritus propounded four arguments against the Heraclitean view. (1) The argument of Homonymy. For instance, whele means both a key and a collar-bone. Now a key and a collar-bone have absolutely no relation to each other; hence, if whele be the inevitable and natural name for one of them, it certainly cannot be equally the inevitable and natural name of the other. (2) The argument of Polyonymy. A man is called $\tilde{a}\nu\theta\rho\omega\pi\sigma\sigma$, or $\mu\epsilon\rho\sigma\psi$, or $\beta\rho\sigma\tau\delta$. These terms are in no way alike; how then can they all three be the necessary names of the one object? (3) The argument of Change, as when Aristocles comes to be called Plato.

(4) The argument of Missing Analogy, as when we have the verb φρονεῖν formed from φρόνησις, while from δικαιοσύνη we find no such verb as δικαιοσυνεῖν.

In general it may be said that the Heracliteans numbered among their followers the majority of the ancient philosophers, though Aristotle stands out as a great exception. He, with his dislike of anything mystical, and with his practical hold on the real, was an uncompromising opponent of the natural theory, and held that language depends on the common argument and conviction of men, — words having no meaning at all in themselves, but having all their meaning put into them by those who use them. They are mere counters, whose value depends wholly upon the assent of mankind.

It was evident, of course, to the Heracliteans themselves, after a little study, that their claims could not be made good in language as it actually existed; for they could not show in the case of many words any essential connection with the objects described by them; and it was also evident that words had greatly changed since the time when they were first coined. Hence, the discussion was put back from words as they were then, to words as they had once been; and this led to speculation as to the origin of language. Setting aside the original notion that it was directly created by the Deity, men sought to show in what manner it first came into existence. If word and object be related, what is the nature of the relation? If the original name was appropriate to the thing named, in what way was it appropriate? The general drift of opinion answered this question in favour of the "onomatopoetic" theory, not in its crudest form, but in the form in which it has been defended in modern times by men like Heyse and his pupil Steinthal, and cautiously by Whitney and by Paul. A passage of Epicurus cited by Diogenes Laërtius (x. 75) gives the fairest and most temperate expression of what this view meant:

"Words in the beginning did not originate by express agreement; but by the very nature of men, in the case of each people, experiencing peculiar feelings and hearing peculiar ideas, they expelled the air accordingly, thus expressing different feelings and ideas differently, just as people differed in location and surroundings."

This is in reality the theory of Heyse. So Lucretius ² argues that speech arose from the impulse of things, just as children who cannot speak, begin to gesture. And what wonder is it, he says, that men mark different feelings by different sounds of the voice? Even dogs and horses and gulls and crows in the same way express varying moods and passions.

¹ Heyse, System der Sprachwissenschaft, edited by Steinthal (Berlin, 1856); Steinthal, Geschichte der Sprachwissenschaft bei den Greichen und Römern, 2 vols. 2d ed. (Berlin, 1891); and Whitney, The Life and Growth of Language (New York, 1880); id. Language and the Study of Language, 4th ed. (New York, 1884).

² Lucretius, v. 1028 foll.

The whole of the ancient teaching on language, its nature and its origin, is summed up and digested in that wonderful dialogue of Plato's which bears the name of Cratylus. This work is by far the most profoundly philosophical linguistic discussion that antiquity produced, — full of deep truths and searching insight. is not too much to say that no treatise on language before the last century is worthy of comparison with it. Yet its importance has been only half appreciated by many, owing to the vein of humour that runs through it, and the playful tone that characterises its most remarkable passages. Some scholars have even regarded it as purely a piece of philosophical fun, a Platonic extravaganza meant only to make a mock of the whole subject of language study. This view is wholly untenable, and whoever holds it misses one of the most striking proofs of the greatness of Plato. It is precisely in the mode of treatment that he has chosen to adopt, and because he has half hidden his deepest truths beneath a veil of humour, that the argument of the Cratylus is so remarkable. Plato had reflected long and seriously upon the nature and phenomena of human speech; he had satisfied himself of many things of which his contemporaries had no conception; yet when he came to gather together the results of his reflections and to mass his facts, it was evident to him that he was still far from having attained a complete philosophy of language. There were still too many things left unexplained, too many lacunæ in his fabric. Hence, he prefers to refrain from dogmatic statement. He will not claim to have a well-rounded and complete system; and, therefore, he elects to treat the subject with a light touch, to speak modestly and with caution, and to let his own observations fall casually into the mind of his reader as suggestions and incentives toward further speculation. His really serious spirit is, therefore, subordinated to a humorous treatment, so that in the *Cratylus* we have, as it were, a giant at play. It gives us, in a way, the chips and shavings of his mental workshop, yet the chips and shavings are those of one whose dust-heap contains more pure gold than the treasuries of other men.

The Cratylus is a dialogue between Socrates, Hermogenes, and Cratylus. Hermogenes is a disciple of the later Eleatics, and Cratylus a sincere believer in the philosophy of Heraclitus. They have been arguing about names, and as each represents a point of view diametrically opposed to that of the other, they call upon Socrates to share in the discussion. He, as usual, professes ignorance of the subject, and then by questions draws out from each of his friends their respective theories. Having listened to them, Socrates criticises each, and in his turn enters upon some speculations of his own in a half-playful yet most suggestive discourse. Just as between Realism and Nominalism, Conceptualism stands as a compromise, and just as between the doctrine of Predestination and that

of the Freedom of the Will stands out Determinism, so the views advanced by Socrates represent a mean between the "natural" theory of Heraclitus and the "conventional" theory of the Eleatics.

Language, he says, is natural, and it is also conventional, for it has in it elements that are natural and those that are conventional. It is originally a work of art, for names are, first of all, imitations of sounds, vocal imitations. Yet vocal imitations, like any other copying, may be most imperfectly executed, and this imperfection may involve the element of chance. For there is much that is accidental or exceptional in language. Some words have had their early meaning so obscured that they have to be helped out by convention. Yet, still, the true name is that which has a natural meaning. Thus, nature, art, and chance, all enter into the formation of language, and they are so closely intertwined as to make it often impossible to separate them. So far as we may hope, however, to discover the natural element and judge of it as derived from art and accident, we can do so only by applying to words a strict analysis. In the first place, many words, perhaps most words, are in their present form, not primary words, nor even simple words, but compound. These we must first resolve until we reach the simple forms. But the simple forms themselves are not the primary ones, for these have been altered by time. Hence. we must in the end resolve words into the letters which compose them, because these, or rather the sounds which

they denote, must have a meaning. This was well known to the first makers of language. They observed that the sound of α denoted vastness and length; that $\dot{\rho}$ expressed motion as in δέω, δοή, τρόμος, δυμβέω ("whirl,") because in uttering that sound the tongue was most agitated and least at rest; that ψ , ϕ , σ , and ζ required a great expenditure of breath and were therefore used in imitative words such as $\zeta \epsilon \omega$ ("seethe"), $\sigma \epsilon \iota \sigma \mu \delta s$, and in general when the thought of air is involved; that the limpid movement of λ , in whose pronunciation the tongue slips along, enables that letter to express smoothness as in λείος, λιπαρόν, κολλώδες ("gluey"); that the sound of γ detained the slipping tongue so that when united with λ , there is given an impression of what is glutinous and clammy, as in $\lambda \iota$ σχρός, γλυκύς, γλοιώδης; that ν , being "sounded within," gives the notion of inwardness; while o suggests roundness. Thus the first language makers impressed thought on names by a principle of imitation. Gesture is the method which a deaf and dumb person would use to make his meaning clear, and language is only vocal gesture, the gesture of the tongue. Yet though thought was stamped on words in their genesis, the lesson that we may learn from words is not philosophical or moral; for the use of words varies indefinitely. It may be metaphysical, accidental, conventional, or in some other way secondary, and so may have no real relation to the thought or feeling of the speaker at the time.

Such is an outline of the Platonic views on language as set forth in the Cratylus. They embody all that was best and most rational in ancient linguistic speculation, and contain principles that philologists have not yet rejected. Plato, in fact, is the first to draw attention to the distinction between simple and compound words. In his mention of the Lautgeberden, he makes an immense advance in the physiology of language; and in speaking of the similarity of certain foreign words to the corresponding terms in Greek, he approaches the very verge of a great discovery. His classification of the letters of the alphabet is very much that which the most modern phoneticians agree to follow. He it is who separated them into voiceful letters, or vowels ($\phi\omega\nu\dot{\eta}e\nu\tau a$), and voiceless letters, or consonants $(\ddot{a}\phi\omega\nu a)$. The letters he subdivides into semivowels $(\dot{\eta}\mu\dot{\iota}\phi\omega\nu a, \lambda, \mu, \nu, \rho, \sigma)$ and true mutes $(\ddot{a}\phi\theta\circ\gamma\gamma a)$.

The really humorous part of the *Cratylus* is that in which Socrates burlesques the extraordinary etymologies of the Sophists, pouring forth a flood of conjectures on the composition of the words which his listeners suggest to him, and playing havoc with all phonetic order and system. "You know," he says, "that the original form of the word is always being overlaid and bedizened by people sticking on and stripping off letters for the sake of euphony, and twisting and turning them in all sorts of ways; and this may be done for ornament or it may be the result of time." And so in restoring the original form, he gives

himself a free hand and alters and syncopates and apocopates and extends and stretches until Hermogenes in a sort of half-skeptical admiration cries out, "Well, Socrates, you have knocked them to pieces manfully." $Ai\theta\eta\rho$ is $aei\thetae\eta\rho$ because it is "always running" about the earth; $\tau e\chi \nu\eta$ he derives from $e\chi o\nu d\eta$ ("possession of mind") and says "you have only to take away the τ , insert σ between the χ and the ν , and another σ between the ν and the η ," upon which Hermogenes very naturally says, "That is a pretty tough etymology."

Every one should read the Cratylus because in its serious parts it abounds in singularly acute speculations; and in its lighter passages it affords us an excellent notion of the absurdities of the word-mongers of the fifth century.1 Many, in fact, were the vagaries of the Sophists in their guesses at etymology and at the principles of languagemaking; and it was not only among the philosophers and quasi-philosophers that this sort of thing prevailed, but it is seen equally in the writers of pure literature, who in this followed the prevailing fashion. As a matter of general interest, one should note that this etymologising craze was something more than a mere fad. It was simply one manifestation of a very Greek trait, - a quickness of imagination which from the earliest times reveals itself linguistically in an almost childish fondness for playing upon words, for paronomasia, for punning. This is, in

¹ See Jowett's translation of the *Cratylus* in his Plato, and especially the Introduction to the Dialogue in question (2d ed., Oxford, 1893).

reality, an oriental trait, as the Hebrew Scriptures attest, and was never regarded as undignified or trifling. Hence, just as in the book of Genesis alone we find some fifty of these pseudo-etymologies, chiefly in plays upon proper names, so we find the Greek poets, from Homer down, seeking analogies and hidden meanings in words and names. Observe Homer's explanation of Odysseus from δδύσσομαι (Od. xix. 406); of Até, η πάντας ἀᾶται (Il. xix. 91); of ἔλεξυς and ἐλεξαίρομαι (Od. xix. 562 foll.). The great pun of Æschylus on the name of Helen, Ἑλένη ἐλένας ἕλανδρας ἐλέπτολις, (Ag. 689) has become classic in English through Peele's imitation (in Edward I.)

"Sweet Helen,

Hell in her name, but heaven in her looks;" and in the most tragic scene of the same play (1040, 1049) two puns are found together. It is probable that this playing upon proper names and also its dignity depended upon the general belief in the so-called *Onomantia*, or deduction of omens from names, which both Greeks and Romans believed in so devoutly that Leotychides pledged the Samian people to a great expedition merely because a perfect stranger who urged it happened to be called Hegesistratus.²

¹ Euripides was called τραγικός ἐτυμολόγος. Cf. Æsch. Prom. 86, 875, 742, 718; Ajax, 574 and in German, Lersch, Sprachphilosophie, iii. 11–17 (Bonn, 1841); Sturz, De Nominibus Graecis, in his Opusc. p. 78 (Leipzig, 1825). Myths seem to have been built upon the basis of false etymologies, as λαός and λᾶας.

² Herod. ix. 91.

Much as the Greeks of this period etymologised, however, there is little evidence that they went so far as to deal with the general subject by itself and for its own sake. Such treatises as those of Gorgias On Names, of Protagoras On Elocution, of Prodicus On the Propriety of Names, and of Licymnius On Phrases are more properly referred to the rhetorical and oratorical teachings of these men regarding which something has already been said. Licymnius, however, did note and partly discuss and classify synonyms, root-words, compounds, and cognates. This may be taken roughly as standing on the border-land of the first two periods in the history of Classical Philology, and as having shown some appreciation of formal grammar.

So far as the Præ-Alexandrians came to any etymological agreement, it was in generally admitting that three principles are involved in the development of words: (1) the principle of **Imitation** ($M \mu \eta \sigma \iota s$), already discussed; (2) the principle of **Metaphor** ($M \epsilon \tau a \phi o \rho a$), by which words lose their primitive meaning and are gradually extended in their application, as when the word "head" or "foot" is applied to a mountain, or when we speak of a man's thought as "bitter," of his voice as "sweet"; (3) the principle of **Antiphrasis** ($A \nu \tau l \phi \rho a \sigma \iota s$) of which the ancients made much, and which they also called the making of

¹A Sicilian teacher of Polus who also wrote a treatise on rhetoric. See Schneidewin in the Göttinger Gel. Anzeiger for 1845.

words κατὰ ἐναντίωσιν, or the naming of things by their opposites. The philosophical principle on which this last is based is a sound one -i.e. that of two antithetical ideas, one is apt to suggest the other, as light suggests darkness, truth suggests falsehood, and so on; but the etymological application of it was grotesque. It appears to have occurred to them because of certain well-known euphemisms, as when, for example, they found the Furies styled Eumenides, "the well-disposed." They also observed in Irony (Elpwvela) a similar principle; and therefore, putting the two together, they inferred that there is something in the human mind which instinctively describes objects by recalling their opposites. Hence, they explained many words on this hypothesis, i just as the later Latin etymologists derived aridus from apseveiv, bellum from bellus, calum from celare, and, above all, the famous lucus a non lucendo, which last is, however, a perfectly correct etymology, though the ancients misunderstood the manner of its derivation.

It will be seen from the preceding pages that language study among the Greeks at this time consisted mainly in ingenious guesswork and in large and loose speculations. As yet there was no such thing as Grammar in the later sense. The word γράμματα meant "the letters of the alphabet"; γραμματιστής was an elementary teacher of reading and writing, beginning with the alphabet. A

¹ See Lobeck, De Antiphrasi et Euphemismo. (s. n. l. n.)

tile found in Attica¹ has syllables scratched upon it $(\alpha\rho, \beta\alpha\rho, \gamma\alpha\rho, \delta\epsilon\rho)$ and the like, which show that spelling was taught and, later, reading. But the word grammaticus $(\gamma\rho\alpha\mu\mu\alpha\tau\iota\kappa\delta)$, at the time of which we are speaking, did not mean a grammarian, but simply a person of ordinary education, — that is, one who was able to read and write.

Nevertheless, as already suggested, a nucleus had been formed around which grammatical teaching in our sense of the word was soon to be developed. Etymology was a favourite subject of discussion. Protagoras of Abdera (c. 411 B.C.) was the first to distinguish grammatical moods and also genders.² Prodicus of Ceos had written a treatise on synonyms; while Plato is regarded as having recognised two distinct parts of speech, the noun ($\ddot{o}\nu o\mu a$) and the verb ($\dot{p}\ddot{\eta}\mu a$); but the distinction which it draws between them is not strictly a grammatical, but a logical, distinction, corresponding to the difference between subject and predicate. The true distinction is made by Aristotle, who also goes much further and mentions conjunctions ($\sigma \dot{u}\nu \delta e \sigma \mu o \iota$), a term loosely used by him, since it includes every kind of connecting particle. The term $\ddot{a}\rho \theta \rho a$ he

¹ Roberts, Greek Epigraphy, p. 170 (Cambridge, 1887–1905).

² Protagoras classified modes of expression as question, answer, prayer, and command. In the matter of gender, he divided nouns as either masculine, feminine, and neuter, this classification being, like our own, natural and not artificial. All male creatures were regarded as masculine, all female creatures as feminine, and all inanimate things as neuter. He uses the term $\gamma \epsilon_{POS}$ which was afterward adopted by the grammarians in the sense of "gender" (Lat. genus).

used in an indefinite way of both pronouns and articles. He distinguished between tenses, and classifies verbs as not only "active" and "passive," but those which are known to us as "neuter" and "deponent." He has something to say of punctuation, though he mentions only one punctuation mark — a short mark placed beneath the first word of the line which ends a sentence. This he called $\pi a \rho a \gamma \rho a \phi \dot{\eta}$, and it is the origin of our word "paragraph," applied to a long sentence or to a number of connected sentences. It is further to be noted that Aristotle gives names to subject and predicate. All these distinctions form no part of grammatical doctrine, since this did not as yet exist; but they were at the time logical or metaphysical in their essence. Later, the Stoics and the Alexandrian scholars narrowed the definition of grammar $(\dot{\eta} \tau \dot{\epsilon} \chi \nu \eta \gamma \rho a \mu \mu a \tau \iota \kappa \dot{\eta})$, and our modern meaning of the word became familiar even while its wider significance still survived.

Literary Study was now undertaken from the standpoint of æsthetics, and Literary Criticism became more scientific. The period which immediately followed the Persian Wars was the richest and most fruitful in the intellectual history of Greece. The poems of Homer had been regarded as containing in their lines something supernatural and almost divine; and this feeling is set forth in the *Ion* of Plato. But popular belief also held that Homer's inspiration was passed on from him to the great poets who were his successors, just as certain branches of the Christian Church assert the doctrine of an Apostolic Succession. Thus the lyric poets shared in this general reverence, and the great dramatic poets were ennobled by popular tradition. We have seen that some rude form of tragedy was said to have originated with Thespis, who was encouraged by Pisistratus to present his plays at Athens. The great tragedians, Æschylus, Sophocles, and Euripides, produced their masterpieces almost contemporaneously. Comedy (invented by Susarion) began to thrive and found its most brilliant exponent in Aristophanes (444-388 B.C.). A newer form of comedy, less harsh in its criticism and less personal in its allusions, was presently developed first by Aristophanes himself (Middle Comedy) and was perfected by Menander (b. 342 B.C.) in the New Comedy. All these plays, both tragedies and comedies, were produced at the great festivals of the Athenians, and prizes were given according to the decision of the people.1 The study of rhetoric and oratory, the popularity of the Drama, and the exceedingly great intelligence of the Greek mind led at once to a careful study of the most famous works in prose as well as poetry. Such study inevitably took the form of exegesis, as when Plato discusses a poem of Simonides in the Protagoras, taking up the questions as to the meaning of certain words in the poem; then as to the

¹ So at first. Afterwards, the prizes were awarded by a committee of five judges chosen by lot.

consistency of Simonides; and finally, a long disquisition on the poem as a whole. Thus says Socrates: "A great deal might be said in praise of the details of the poem, which is a charming piece of workmanship, and very finished, but that would be tedious. I should like, however, to point out the general intention of the poem." And then he proceeds to do so at considerable length. This is essentially exegetical treatment and belongs to the science of Hermeneutics, or exposition. In the Republic we have Æsthetic Criticism. But it was Aristotle in his Poetica who produced a work of true æsthetic criticism, which, though brief and unfinished, is so full of suggestion and profound thought as to make it to-day perhaps the most widely studied of all his numerous writings.1 Professor Butcher calls attention to one feature of the treatise which emphasises an important fact in the study of Greek art. He says: -

"The distinction between fine and useful art was first brought out fully by Aristotle. In the history of Greek art we are struck rather by the union between the two forms of art than by their independence. It was a loss for art when the spheres of use and beauty came in practice to be dissevered, when the useful object ceased to be decorative, and the things of common life no longer gave delight to the maker and to the user. But the theoretic

¹ See Butcher, Aristotle's Theory of Poetry and Fine Art (London, 1902). This volume contains a critical text and a translation of the Poetics, with a most admirable discussion of its teachings and their meaning.

distinction between fine and useful art needed to be laid down, and to Aristotle we owe the first clear conception of fine art as a free and independent activity of the mind, outside the domain both of religion and of politics, having an end distinct from that of education or moral improvement."

A famous passage in the *Poetics* is that which refers to the doctrine of "purgation" ($\kappa \dot{a}\theta a\rho\sigma v_s$). Plato had said of tragedy that it satisfies "the natural hunger for sorrow and weeping," 1 and that "poetry feeds and waters the passions instead of starving them." Thus he would banish the poets from his ideal State. Aristotle, on the other hand, "held that it is not desirable to kill or to starve the emotional part of the soul; and that the regulated indulgence of the feelings serves to maintain the balance of our nature." Professor Butcher, summarising an explanation put forth in 1857 by J. Bernays, says that katharsis is a medical metaphor and "denotes a pathological effect on the soul, analogous to the effect of medicine on the body." The thought, as he interprets it, may be expressed thus: Tragedy excites the emotions of pity and fear - kindred emotions that are in the breasts of all men - and by the act of excitation affords a pleasurable relief. The feelings called forth by the tragic spectacle are not, indeed, permanently removed, but are quieted for the time. . . . The stage, in fact, provides a harmless and pleasurable outlet

¹ Republic, x. 606.

for instincts which demand satisfaction, and which can be indulged here more fearlessly than in real life.¹

It is popularly supposed that the doctrine of the Three Dramatic Unities is set forth in the *Poetica* of Aristotle. This is not strictly true, however, since Aristotle definitely demands only the unity of action, — namely, that "within the single and complete action which constitutes the unity of a play," the successive incidents should be connected together by the law of necessary and probable sequence. One may read into the treatise a suggestion of the unity of time and the unity of place; yet these were not actually formulated until the sixteenth century by Castelvetro, an Italian editor of Aristotle.²

The Greeks of Aristotle's time regarded tragedy as the highest form of literature. Certainly to them it was more moving and more profound in its interpretation of life than even the epic. We must remember, however, that the drama is more than literature, since it is literature blended with all the other arts. The dance, the song, the painter's colouring, and instrumental music, too, are there, and the effect of animated sculpture is found in the living men and women who impersonate the characters. Hence the acted drama is not literature pure and simple, but it is a mélange of all the arts.³

¹ Butcher, op. cit. pp. 227-228.

² See Spingarn, Literary Criticism in the Renaissance, pp. 90-101 (New York, 1908).

³ Peck, Literature, pp. 22, 28 (New York, 1908).

One dwells upon Aristotle's *Poetica*, because it is the most remarkable specimen of æsthetic criticism which we now possess. But criticism of various kinds was to be found in other writers, and especially in **Heraclides Ponticus** (fl. 340 B.C.), who came to Athens, where he studied under Plato. He is said to have written upon many subjects — philosophy, mathematics, music, history, politics, language, and poetry. Only fragments of these treatises remain, though we have a synopsis of one of his books on the subject of political science. There was also **Theophrastus** of Lesbos (b. 372 B.C.) who has left fragments of two works, one *On Comedy* and the other *On Style*. In the second he is said to have treated of metres and of solecisms.¹

Much criticism must have been given orally by the Sophists in their lectures; and in the dramas themselves by the playwrights in their hits at one another. This was especially the case with comic poets, above all, Aristophanes, who was fond of gibing at Euripides and of praising Æschylus. It is said that a whole passage of the Telephus, by Euripides, was subsequently omitted because Aristophanes had made such game of it.² Another form of criticism is to be found in the parodies of serious works.

¹ See Voss, De Heraclidis Pontici Vita et Scriptis (Rostock, 1897); and the dissertation by Rabe on Theophrastus (Bonn, 1890).

² See Egger, *Histoire de la Critique*, pp. 45-70. Later Antiochus of Alexandria wrote a book on the poets who were criticised in the Middle Comedy. See Athenæus, xi. p. 232.

Even the heroic poetry of Homer and of the Cyclic writers became a subject of burlesque. There is, in fact, scarcely anything more characteristic of the later Greeks than the extent to which parody prevailed. It indicates how far the critical spirit was supplanting the creative; for while few can create, any one can ridicule that which has been created.

In the fifth century, the mock-heroic was represented in the Batrachomyomachia, or Battle of the Frogs and Mice, ascribed to one Pigres. It is not in itself, however, a direct parody any more than is Pope's Rape of the Lock; but like that, it may be called pure literature. With Hegemon of Thasos, however, true Parody begins. Hegemon directly burlesqued the epic Gigantomachia in a play to which the Athenians were listening when the news came to them that their Sicilian expedition in the Peloponnesian War had been utterly destroyed. A more audacious parodist was Matron of Pitana (c. 380 B.C.), who was the first to burlesque Homer. From him we have a fragment which mocks the opening lines of the Odyssey. The first line shows that this parody was of a gastronomical nature, for it reads:—

Δείπνά μοι ἔσπετε, Μοῦσα, πολύτροφα καὶ μάλα πολλά!

Sing to me, Muse, of the feasts that are filling and many in number!

The philosophers were parodied by Timon of Phlius,

¹ Athenæus, i. p. 5; iii. p. 108.

² Athenæus, iv. pp. 134-137, and Moser, *Ueber Matron den Parodiker* in Daub and Kreuzer's *Studien*, vi. pp. 293 foll.

known as the Sillographer, whose silli $(\sigma i \lambda \lambda o \iota)^1$ guyed the teaching of the dogmatic philosophers in epic verse. The classic tragedy was burlesqued, though at a later period, by Rhinthon of Tarentum (or Syracuse) in plays which gave rise to the so-called mock tragedy $(i\lambda a \rho \sigma \tau \rho a \gamma \phi \delta i a)$, or la tragédie pour rire. It must be said also that a certain ironical spirit appears in a collection by Aristotle of questions intended to point out some of the inconsistencies or absurdities in Homer $(\Pi \rho o \beta \lambda \dot{\eta} \mu a \tau a)$.

There are evidences that during the latter part of this period a good deal of confusion existed in the texts of standard authors. It is known that Aristotle himself edited a special edition of Homer for the use of his pupil, Alexander the Great, — an edition known as "the casket edition." It is also a tradition that Lycurgus (c. 350 B.C.), the Athenian (not to be confounded with Lycurgus the mythical Spartan legislator), erected bronze statues to the three great tragic poets, Æschylus, Sophocles, and Euripides, and caused authentic copies of their plays to be made and preserved in the public archives. These copies were made after a careful collation of the actors' copies. Concerning this recension, however, very little is known, though the fact itself is significant.² Even if the State codex prepared by

¹ Literally "Squints." Cf. our theatrical slang, "It's a scream!" See Paul, *De Sillis* (Berlin, 1821); Delapierre, *La Parodie chez les Grecs*, etc. (London, 1871), and Carroll, *Aristotle's Poetics*, etc. (Baltimore, 1895).

² Wilamowitz, in *Hermes*, xiv. 151; and id., Introduction to the *Heraklas* of Euripides (Berlin, 1889).

Lycurgus was only a careful exemplar and not very critically made, it still remains a work of great importance in the history of Text Criticism, because down to the time of the Alexandrians, it remained a standard edition and was held in great esteem. It seems probable, however, that it really did rest upon a critical basis, since there was no lack of editions, nor could an arbitrarily chosen text have attained to so much authority. Granting also that the critical comparison of manuscripts had not long existed, there were certainly autographa preserved in the families of the tragic poets. Furthermore, there was an original codex in each instance, an assertion that cannot be made regarding the Homeric text. The original codex, however carefully copied, must still have contained errors, and may have been supplied with marginal notes after being compared with the version used by the actors in the theatre. More than this, however, it is impossible to say; for, regarding the methods of recension, no actual evidence survives.

Attention was much earlier given to Music than to the other arts, and the study of it had a scientific character. Many treatises are spoken of with the title $\Pi \epsilon \rho i$ Movourie, though none of them have descended to our times. The earliest known writer on music was Lasus of Hermione, a contemporary of Xenophanes and Simonides, and said to have been the teacher of Pindar. He is a figure of importance in the history of Greek music introducing in

the dithyramb a much greater freedom of rhythm in music, giving to it an accompaniment of flutes, and adding to the number of voices. By some he was numbered among the Seven Sages of Greece.\(^1\) The Pythagoreans were especially devoted to music, among them, the famous Archytas of Tarentum, who wrote a treatise with the title 'Aphovikov. In the case of many of the writings that have descended to us by report only, it is impossible to be certain of their exact subject, inasmuch as poetry and music were so closely allied that the name $Mov\sigma uc\dot{\eta}$ was used indifferently of either. The only important treatise, written perhaps in the Alexandrian Age, of which now we have any portion, is that by Aristoxenus styled 'Aphovikà $\Sigma \tauoi\chi e i a$, of which there still remain some fragments, edited by Saran.\(^2\)

The foundation of classical music among the Greeks was ascribed by them to Terpander, an Æolian Greek of Lesbos (c. 675 B.C.), who is said to have given the lyre seven strings instead of four; but this statement is certainly inaccurate. Pausanius³ says that Terpander merely added four strings to the seven that already existed on the lyre. Flute-playing was still older, but was not scientifically studied until the time of Sacadas of Argos (c. 580 B.C.).

The vocal music of the ancients differed from modern music in that part-singing was unknown, there being only

¹ See Athenæus, viii. p. 338, and Diog. Laërt. i. 42.

² Edited by Saran (Leipzig, 1893).

⁸ iii. 12. 10. Terpander first set poetry to music.

a difference of octaves, as when men and boys sang in the same chorus. Another difference was in the modes, which were distinguished from each other by the place of the semitones in the octave. Greek music had seven modes, therefore, as against the two modes (major and minor) with which we are acquainted. These seven modes got their names from the three great divisions of the Greeks (Dorian, Æolian, and Ionian) and from the Asiatic peoples (Phrygian, Lydian, Mixolydian, and Hypolydian).¹

The musical notation used by the Greeks had two distinct systems of signs, one for the voice and the other for the instrument. Those for the voice were taken from the Ionic alphabet; while the instrumental notation was derived from the first fourteen letters of an older alphabet which retained the digamma, besides an ancient form of iota, and two forms of lambda. Only a few specimens of Greek musical notation have come down to us, the last being a hymn to Apollo found at Delphi in 1893 carved upon the fragments of a stone. It has been reconstructed by Oscar Fleischer, whose theory is that "Greek melody emanated from the words, while rhythm

¹ See Engel, The Music of the Most Ancient Nations (London, 1866); Gevaert, Histoire et Thèorie de la Musique dans l'Antiquité (Ghent, 1881); Westphal, Die Musik des griechischen Alterthums (Leipzig, 1887); Monro, Modes of Ancient Greek Music (Oxford, 1894); Henderson, How Music Developed (New York, 1898); and Gleditsch in Iwan Müller's Handbuch der classischen Alterthumswissenschaft, ii. 3, 3d ed. (Munich, 1901). For a simple account of early music, see Untersteiner, A Short History of Music, pp. 13-45 (New York, 1902).

and metre were given by the musical accents of the words." Greek music was introduced at Rome and was greatly admired. Nero gave public entertainments resembling modern concerts, and Domitian (86 A.D.) built a large structure, which he called the Odeum for the musical exercises that were held there under his direction.²

Greek painting reached its highest development at the same time with sculpture. Even earlier fresco-painting had been borrowed from the Egyptians, and vase-painting which we can trace through existing remains, shows us how continuous was the development. One may believe that the graphic art in Greece began as early as the eighth century B.C.; and Eumares of Athens began to distinguish the sexes in his paintings, probably by the use of various colours, since heretofore artists had worked in monochrome on walls or whitened tablets of clay.

But the greatest painters were those who appeared soon after the Persian wars. Polygnotus of Thasos was called the discoverer of the art, taking subjects from mythology (460 B.C.). His contemporaries treated events of recent history, decorating the public buildings and temples. Polygnotus used only four colours—black, white, yellow, and red—yet gave variety to his painting by the difference in shading. Soon afterward the scene-painter,

¹See Fleischer, Die Reste der altgriechischen Tonkunst (Leipzig, 1900).

²Little can be learned about music from Roman writers, such as Martianus Capella and Boethius, since they merely copy what they learned from the Greeks.

Agatharchus of Samos, discovered new principles of perspective and shading, on which subjects he wrote a book. His methods were followed on panels by Apollodorus of Athens and others. The school which he founded was usually called the Ionic School, and it comprised the two great rivals, Zeuxis, who copied nature with wonderful truth, and Parrhasius of Ephesus. Encaustic painting was perfected by Pausias, in the fourth century, and his "Black Ox" was as famous in antiquity as Paul Potter's bull in modern times. Great skill was attained by Apelles of Ephesus, whose work was very graceful. We have scarcely any remains of Grecian paintings of the classical age except those which are found upon the tombs, usually Etruscan, and often copied from Greek models.

Gem-cutting was learned from the Greeks by the Egyptians, but it cannot be said that the Greeks greatly improved upon their models. For cutting gems they used a sharp stone (obsidian) or a minute metal disk worked by a drill which cut the deeper parts of the pattern. The tools were charged with a sort of emery powder.² The Greeks cared little for the Egyptian scarabs, and preferred cameos made of onyx, the figures standing out vividly on a dark background. The oldest Greek jeweller whose

¹See Woltmann and Woermann, A History of Painting. Eng. trans. (New York, 1901); Girard, La Peinture Antique (Paris, 1895); Cros and Henri, L'Encaustique (Paris, 1884); and Böckler, Die Polychromie in der antiken Sculptur (Aschersleben, 1882).

² Pliny, H. N. xxvii. 76.

name has come down to us is Mnesarchus, the father of the philosopher Pythagoras (c. 600 B.C.). The most famous master of gem-cutting in Greek times was Pyrgoteles in the fourth century B.C. He was the only artist whom Alexander the Great would allow to cut his likeness. It may be added that not until later times did the love of precious stones such as pearls and emeralds become a passion.¹

The Præ-Alexandrian Period may be viewed as ending with the death of Aristotle (322 B.C.) and the complete domination of Greece by the Macedonian kings. The supremacy of Macedon, in fact, marks the decadence of what had been most original and striking in the genius of the Greeks, whether political, literary, or philosophical. The history of this period reveals in Greece the gradual development and decline that have been repeated in the history of every other nation since the world began, whenever that history has extended over a sufficient time to give play to the same creative and the same destructive forces. So in Greece we find at first a vigorous and quick-witted people, in its formative period, cherishing a comparatively simple and intelligible faith, and with a literature that springs up less as the result of conscious art than as the spontaneous outpouring of native genius,

¹ See Middleton, The Engraved Gems of Classical Times (Cambridge, 1891); Murray, A Handbook of Greek Archæology, pp. 40-50, 146-173 (London, 1892); and Fowler and Wheeler, A Handbook of Greek Archæology, ch. vii (New York, 1909).

seeking to give fit expression to the national aspirations. Gradually the notion of formal art and formulaic teaching is implanted in men's minds. Schools arise, and what the few have done before from natural prompting, the many learn to do according to rule and precept.

"Most can raise the flowers now For all have got the seed."

The first result is to develop to the full the powers of men of genius. There is a happy blending of the old creative gifts, and of the old freshness and spontaneity, with the power that comes from training and from the condensation of accumulated experience into definite rules. The Greek mind, thus stimulated and developed, attacks all of the great problems that confront and challenge the human intellect. The philosophy of language, the sources of style, the arts of expression, the theory of government, the laws of thought, the constitution of the universe, and the nature of the gods themselves, are all explained fearlessly and often with an acuteness that has never found its parallel. But the limitations of the mind are at last reached, and its most earnest efforts appear to lead to nescience; so that Greece in the sphere of government ended with despotism, in philosophy with negation, in religion with scepticism. The Greek genius in its later struggles can best be described in Matthew Arnold's exquisite words as "a beautiful and ineffectual angel beating in the void its luminous wings in vain."

There is some truth in the belief that a general and highly developed culture is fatal to originality, because it inevitably leads to established standards and thus makes everything conventional. A dead level of excellence takes the place of a few striking manifestations of creative power. The average man is more intelligent, but the exceptional man is less original, until at last exceptional men no more exist. Society becomes intellectually blase and reduces everything to formulas. Creators give place to critics who are slaves to what they call "good form." But it is not consistent with good form to be imaginative and enthusiastic and original. This is held to be eccentric. Thus in a highly civilised community the whole drift of thought is toward the commonplace; and thus in the later philosophy, the speculative and idealistic systems give way to a sort of mild eclecticism that does not go very far beyond the practical questions which relate to the life of every day. The epic is supplanted by the drama with its many meretricious allurements. In the drama itself the intense and powerful tragedies of Æschylus and Sophocles are first thrust aside by the rationalistic and rather cynical plays of Euripides, until tragedy gives way to the elegant and amusing comedy of Menander, with its urbane dialogue and its realism, which takes it out of the realm of pure poetry.²

¹ See Verrall, *Euripides the Rationalist*, introduction and pp. 257-60 (Cambridge, 1895); and Decharme, *Euripides and the Spirit of his Dramas*, pp.74-92. Eng. trans. (New York, 1906).

² Horace, Sat. i. 4, 46-47.

The Præ-Alexandrian Age ends, then, when the creative impulse had largely yielded to the critical. What remained for serious men, therefore, was not to attempt anything new, but rather to study what had already been produced—to analyse, to criticise, and to classify. Thus there came into especial prominence the sciences that are collateral and subsidiary to literature and linguistic study—hermeneutics, lexicography, text criticism, and formal grammar.

[Bibliography.—In addition to the books already cited in this chapter, see the anecdotal works of Diogenes Laërtius, English translation (London, 1853), and Athenæus, English translation (London, 1854); together with Saintsbury, A History of Criticism, i., pp. 3-59 (New York, 1900); Jebb, The Growth and Influence of Classical Greek Poetry (London, 1893); Haigh, The Tragic Drama of the Greeks (Oxford, 1896); Denis, La Comédie Greeque, 2 vols. (Paris, 1886); Croiset, An Abridged History of Greek Literature, English translation (New York, 1904); and Courthope, Life in Poetry: Law in Taste, pp. 37-221 (London, 1901).]

III

THE ALEXANDRIAN PERIOD

A. THE ALEXANDRIAN SCHOOL

In the year 306 B.C., Demetrius Phalereus, statesman, poet, philosopher, and orator, having been sentenced to death at Athens, left Greece and passed over the sea to the infant city of Alexandria in Egypt. It was exactly twenty-five years from the time when Alexander the Great, had, with his own hand, traced the general plan of the city to which he gave his name and as to which he issued the most peremptory orders that it should be made the metropolis of the entire world. The commands of a king cannot give enduring greatness to a city; but the natural advantages of Alexandria were such that a great commercial community, when planted there, was sure to live and flourish throughout succeeding ages.

Alexandria lay upon a projecting tongue of land, so situated that the whole trade of the Mediterranean centred in it. Down the Nile there floated to its wharves the wealth of barbaric Africa. To it also came the treasures of the East, carried over vast spaces by caravans — silks from China, spices and jewels from India, and enormous masses of gold and silver from lands of which the names were scarcely known even to contemporary geographers.

In its harbour were the vessels of every country, from Asia in the East, to Spain and Gaul and even Britain in the West.

To the outward eye, Alexandria was extremely beautiful. Through its entire length ran two great boulevards, shaded by mighty trees, and diversified by parterres of multicoloured flowers amid which fountains splashed and costly marbles gleamed. One-fifth of the whole city was reserved for the Greek kings who succeeded Alexander, and was known as the Royal Residence. In it, before long, were the palaces of the reigning family; and there were, besides, parks and gardens, brilliant with tropical foliage and adorned with masterpieces of Grecian sculpture, while sphinxes and obelisks gave a suggestion of oriental strangeness. As one looked seaward, his eye beheld, over the blue water, the rocks of the sheltering island, Pharos, on which Ptolemy II. reared a pyramidal lighthouse of marble four hundred feet in height at a cost of eight hundred silver talents (\$940,000), and justly numbered among the seven wonders of the world. At the time when Demetrius took refuge there, the city contained more than one hundred thousand inhabitants, and was humming with life. Its people were alert, energetic, proud of Alexandria's distinction, and ambitious for its future. Dinocrates, its designer, had planned it with a sublime belief in its destiny, giving it a circumference of more than fifteen miles, and foreseeing already its coming

splendour. Ptolemy Soter, who was just about to assume the style and title of a king, was a man of large conceptions and liberal ideas. His mother had been a concubine of Philip of Macedon, so that Ptolemy was believed to be half-brother to the great Alexander, under whom he had served with conspicuous success in Asia. A great soldier and a consummate statesman, he was also a true Greek in his love of art and science and literature. In fact, he had himself written a narrative of the wars of Alexander. He was still carrying on a campaign against Antigonus; but the contest was nearing its end, and already Ptolemy was turning his thoughts to magnificent designs for enhancing the glory and splendour of his capital.

It was the psychological moment for some remarkable achievement. All the conditions were absolutely favourable. Here was a rich, populous, and youthful city, possessing the Hellenic traditions of intellectual greatness, yet growing up in a world that was broader than little Hellas. Its people were receptive to new ideas, liberalised by contact with a civilisation far older than that of Greece itself, and filled with an intense desire to gain at once, not only the commercial, but the intellectual supremacy of the world. The first Greek king of Egypt

¹This narrative was largely used by Arrian in preparing his chief work, the *Anabasis of Alexander*. The fragments of Ptolemy's work can be found in the Didot edition of Arrian (Paris, 1848).

possessed practically unlimited resources. He was gifted with a trained intelligence and taste, and inspired with a splendid enthusiasm for all that was noble and refining. The suggestion alone was needed to employ these unusual opportunities in a way that should be worthy of their inherent possibilities. Such a suggestion came from the exiled Athenian, Demetrius Phalereus.

Demetrius himself was a man well fitted to influence even so independent a ruler as King Ptolemy. He was among the last of the Attic orators of distinction. He had governed his native city so ably that three hundred and ninety statues had been erected by the Athenians in his honour. He was also a highly cultivated scholar, the schoolmate of Menander, and a pupil of Theophrastus, who succeeded Aristotle at the head of the Peripatetic School. To him was due the revival of Homeric recitation by the Rhapsodes, after these had fallen into disuse. He was himself the author of two books relating to the Iliad and four relating to the Odyssey, supposed to have dealt with text criticism. No one could have been better fitted than he to advise the king in whatever related to any project for the advancement of learning. Therefore, one is not surprised that to him is ascribed the suggestion which soon rendered Alexandria the intellectual capital of the world and profoundly influenced the subsequent history of Greek and Roman learning. The immediate fruits of his wise counsel were two — the establishment of a great Museum ($\tau \delta$ Mu $\sigma \epsilon \hat{i}o\nu$), and also the foundation of the famous Alexandrian Library.¹

An account of the Museum is given by Strabo.² It was attached to the royal palace in the most beautiful quarter of the city, overlooking the harbour, and surrounded by lawns, porticos, and marvels of decorative art. It contained an observatory for its astronomers, laboratories, a selected library, and a great hall which was practically a theatre of magnificent proportions arranged as a public lecture room. In a second hall, the scholars who were drawn to the Museum from all countries dined together, like the master and fellows of an English college. Attached to the Museum were botanical and zoölogical gardens. The object of the whole institution was to encourage original research. At first there was no teaching, so that the Museum bore a striking resemblance to the Carnegie Institution in Washington. Later it became in essence a great university in which the professors lectured, each on his own specialty, to students who numbered at one time as many as fourteen thousand. The professors were primarily under the supervision of principals whom we may call deans, chosen by the whole body; while the administration of the

¹ Athenæus, v. p. 203.

² Strabo, xviii. p. 794. See also Parthey, Das Alexandrinische Museum (Berlin, 1838); Ritschl, Opuscula, i. pp. 1-70, 123-172, 197-237; Weniger, Das Alexandrinische Museum (1895); Walden, The Universities of Ancient Greece, pp. 48-50 (New York, 1999); Graves, A History of Education before the Middle Ages (New York, 1999).

Museum was in the hands of a priest appointed by the king and in later times by the Roman emperor. The expense of the whole was borne by the public treasury. The second Ptolemy grouped the lecturers under four faculties representing, respectively, Literature, Mathematics, Astronomy, and Medicine, corresponding to the modern divisions of Philosophy, Applied Science, Pure Science, and Medicine.

The administrative head of the Museum was not, however, charged with all the functions of an American university president or chancellor. We find in Alexandria a practical division of duties such as has been proposed in very recent times, became it seems impossible for a single man to be at once the administrative and the educational head of a great university. The educational head of the University at Alexandria was the person in charge of the great Library, which sprang up side by side with the Museum, and was necessitated by it. The second Ptolemy collected from all parts of Greece and Asia an immense number of manuscripts, some of which, as already said, were stored in the Museum, while the rest were housed separately in another building known as the Serapeum. Foreign books were also purchased and translations of them were added to the Library.1 The Septuagint version of the Old Testament is said to

¹ Callimachus, the second librarian, was the first to introduce a number of Egyptian and Hebrew manuscripts.

have been thus made. Galen mentions the fact that the autographa or original copies of Æschylus, Sophocles, and Euripides were purchased for the Library, which is believed at the time of its greatest fame to have contained between five hundred thousand and six hundred thousand volumes.¹ Even before the death of Demetrius there were some fifty thousand volumes on its shelves. Private collections such as that of Aristotle were purchased, as well as rare editions and especially authoritative copies.

It can readily be seen how the existence of an endowed school side by side with a library of such magnificent proportions would quickly foster the systematic and orderly study of many subjects that had previously been taken up at random by individuals, working independently and often with very unsatisfactory and inadequate materials. At last, in every sphere of learning, a large body of highly trained men, provided with every facility for research and freed from any pecuniary anxiety, could labour without haste and without rest, apportioning their work so as to bring into play the peculiar talents of each, and accumulating a great mass of data—of facts, results, and principles, which each succeeding generation found classified for its use and to which in turn it added. Hence, at once a great development of the scientific spirit in

¹ See Ritschl, Die Alexandrinischen Bibliotheken (Breslau, 1838); Birt, Das Antike Buchwesen (Berlin, 1882); Geraud, Les Livres dans l'Antiquité, ch. x (Paris, 1840); Castellani, Delle Biblioteche nell' Antichità (Bologna, 1884).

every direction followed almost immediately upon the establishment of the Museum and Library and what is roughly and somewhat inaccurately styled the Alexandrian School. There were, in fact, several distinct outgrowths from the Alexandrian researches and training, but there was no "school" at all in the sense given to that word when we speak of the Ionic School, or the Pythagorean School, or the Stoic School. In each of these a number of able men were all dominated by certain common philosophical principles and ideas and holding fast to a common theory. But at Alexandria such was not the case. The learned men who lived together in the Museum had no single philosophy and held no theory in common. Their activities took the most diverse direction. The only thing that all of them possessed together was a love of science and of scientific methods. It would be far more proper to speak of the "schools" at Alexandria, since there were really many, - a school of mathematics, a school of astronomy, a school of medicine, a school of philosophy, a school of literature, a school of grammar and linguistics, and finally, a school of textual criticism.1

Yet these different schools had one characteristic so

¹ See St. Hilaire, De l'Ecole d'Alexandrie (Paris, 1845); Simon, Histoire de l'Ecole d'Alexandrie, 2 vols. (Paris, 1844-45); and Vacherot, Histoire Critique de l'Ecole d'Alexandrie, 3 vols. (Paris, 1846-51). Kingsley's Alexandrian Schools (Cambridge, 1854) is disappointing and relates only to the philosophical side.

far in common as to give a sort of family likeness to all the productions of the Alexandrian scholars, and thus in some measure to justify us in speaking of the Alexandrian "school." Just as the writings of the earlier Greeks exhibit a certain instinctive originality and freshness of thought, so the writings of the Alexandrians are steeped in erudition. They smell of the lamp. Before all else, they are learned productions; and this is the trait that belongs to every single work that came from their hands. It is seen no less in their literature than in their science. A German writer has very aptly said: "It is as though the great library strove to reproduce itself in each individual work." Therefore we find the Alexandrian Poetry, such as that of Callimachus, Aratus, and Apollonius, suggesting to the reader at every turn a learned treatise. So Philetas of Cos (c. 300 B.C.), though a writer of elegies, died from overwork in scientific study. It was he, indeed, who made the first attempt at an Homeric lexicon ("Ατακτα, Γλώσσαι)." The astronomers and the mathematicians were morbidly anxious about the rhetorical and grammatical merits of the language in which they wrote of the equinoxes and the ecliptic, or the solution of the quadratic equation. So, again, the geographers and historians supplied their treatises with archæological notes. And thus, at first, even the most abstract lectures were given in verse. It was an age of encyclopædic scholar-

¹ See Couat, La Poésie Alexandrine, pp. 68 foll. (Paris, 1882).

ship; and it tinges the Alexandrian epics and dramas no less than the treatises on grammar and lexicography. This is what is meant by the Alexandrian Influence,—an influence that was afterward so powerfully felt at Rome, where it reproduced itself in the writings of Varro, the polymath, no less than in the lines of Vergil, the most learned of all the Latin poets.

It is precisely because the whole tendency of the Alexandrians was toward reflection and research that their work in pure literature was of slight æsthetic value, being formal, pedantic, and void of imagination, and that their philosophy was marked by a learned eclecticism. The highest philosophy, like the noblest literature, demands, in addition to mere learning, an intellectual subtlety and genuine inspiration. But the study of mathematics, of mechanics, and of physics was now fruitful, and in many respects so sure in its results as to be the admiration of scientific men to-day; while no one can overestimate the enduring value of that systematic labour in the study of language (lexicography and grammar) and in the criticism of texts.

So far as literature is concerned, the Alexandrians were at their best in collecting and preserving what had come down to them from the preceding centuries. What they added of their own was vast in amount and devoid of any great æsthetic merit. Little more than the names of the Alexandrian writers of epics and lyrics and dramas

are known to-day. Here and there a few fragments tell of vast volumes which were read and even admired at Alexandria, but which were either so obscure in their treatment or so technical in their themes as to deserve the oblivion that has come upon them.

On the other hand, the Alexandrians reduced criticism and the study of style to an exact science. The first librarian, Zenodotus of Ephesus (c. 300 B.C.), collected the epic and lyric poets; Lycophron of Colchis, the comic poets; and Alexander of Ætolus, the tragic poets. The second librarian, Callimachus of Cyrene (c. 275 B.C.), made a catalogue of the Library in one hundred and twenty books which may be said to have laid the foundation for a scientific study of Greek literature. The third librarian, Eratosthenes of Cyrene (c. 200 B.C.), wrote an admirable treatise on geography and another on the Old Comedy, in at least twelve books, bringing to bear upon the subject a wealth of knowledge and excellent taste. The fourth librarian, Aristophanes of Byzantium (c. 200 B.C.), has been styled "the greatest philologist of antiquity." It is he who is said to have invented the accents which are now employed in writing Greek, and also a system of punctuation. Likewise he suggested critical signs $(\sigma \eta \mu \epsilon i a)$ and used them in his editions of Homer, Hesiod, of the three great tragic poets, and other famous writers. It is claimed also that he wrote the Hypotheses or condensed plots to the greater dramatists, with notes and æsthetic criticisms.¹ Most important of all is his establishment of what have become known as "the canons" or lists of the very best authors of Greek antiquity. The Alexandrian Canon² was prepared with the greatest care, and it represents the matured and final judgment of the Alexandrian students of literature as to those names of Greek writers whose works embodied the very highest excellence in their especial spheres, and who were thought to be models for all future authors.

The details of the Canon are as follows: (1) Epic Poets, Homer, Hesiod, Pisander, Panyasis, Antimachus.

- (2) Iambic Poets, Archilochus, Simonides, Hipponax.
- (3) Lyric Poets, Alcman, Alcæus, Sappho, Stesichorus, Pindar, Bacchylides, Ibycus, Anacreon, Simonides. (4) Elegiac Poets, Callinus, Minnermus, Philetas, Callimachus.
- (5) Tragic Poets (First Class), Æschylus, Sophocles, Euripides, Ion, Achæus, Agathon. (Second Class, or Tragic Pleiades), Alexander the Ætolian, Philiscus of Corcyra, Sositheus, Homer the Younger, Æantides, Sosiphanes or Sosicles, Lycophron. (6) Comic Poets (Old Comedy), Epicharmus, Cratinus, Eupolis, Aristophanes, Pherecrates, Plato. (Middle Comedy), Antiphanes,

¹ See Gudeman, Outlines of the History of Classical Philology, 3d ed., pp. 11-13 (Boston, 1902), and infra, pp. 100-102.

² The word canon $(\kappa a \nu \omega \nu)$ meant originally a reed, and then a carpenter's rule; so that, in a figurative sense, the word came to denote whatever served as a model or norm. The Canon Alexandrinus is really made up of several canons as may be seen in the text above.

Alexis. (New Comedy), Menander, Philippides, Diphilus, Philemon, Apollodorus. (7) Historians, Herodotus, Thucydides, Xenophon, Theopompus, Ephorus, Philistus, Anaximenes, Callisthenes. (8) Orators (the ten Attic Orators), Antiphon, Andocides, Lysias, Isocrates, Isæus, Æschines, Lycurgus, Demosthenes, Hyperides, Dinarchus. (9) Philosophers, Plato, Xenophon, Æschines, Aristotle, Theophrastus. (10) Poetic Pleiades (seven poets of the same epoch with one another), Apollonius Rhodius, Aratus, Philiscus, Homer the Younger, Lycophron, Nicander, Theocritus.

This Canon was felt to be necessary owing to the great multitude of books that began to appear in the Alexandrian Age. There was a certain apprehension lest the weight of numbers should prevail against the claims of real merit, and lest the great classics should be lost in a flood of innovation. The Canon was intended to serve and it did serve as a standard of comparison by which all literary productions must be judged; and thus it preserved purity of style and some definite laws of literary expression. From the standpoint of our own times the establishment of the Alexandrian Canon wrought both good and harm. It undoubtedly led to the preservation of some of the greatest works of antiquity; but it also led to the loss of other works that would be of inestimable value to the modern classical philologist. These latter works were allowed to perish just because they were not

included by the Alexandrian critics in their authoritative list. The mere fact that such a clearly defined standard existed, was also, doubtless, an injury to the most gifted writers of the following centuries. It fostered a spirit of imitation and discouraged the free play of their talents by compelling them to a sort of conformity with predecessors whose genius and temperament were of a very different type.¹

Of original composition under the head of pure literature, the most interesting genre is found in the Idylls of Theocritus, whose time is so well within the early days of this period as to make it doubtful whether it is wholly fair to class him as an Alexandrian. The lyric poets come next in order of merit, the best of them being Callimachus, of whose work, however, only a few hymns and fragmentary passages and epigrams remain. It may be said that in the writing of epigrams the Alexandrians were very felicitous, as might have been expected from those who so carefully studied the art of expression and who were always striving after neatness and precision of style. The dramatic works composed at Alexandria are now wholly lost. Of the epics, two famous specimens remain, — the Argonautica of Apollonius Rhodius, and the Alexandra of Lycophron. The first is inordinately dull,

¹ See Usener, Dionysii Halic. Librorum de Imitatione Reliquiæ (Leipzig, 1899); Steffen, De Canone qui Dicitur Aristophanis et Aristarchi (Leipzig, 1876); Hartmann, De Canone Decem Oratorum (Göttingen, 1891); and Susemihl, op. cit. i. pp. 445, 484; ii. 674 foll. 694-697.

heavily charged with ponderous learning, and reading in parts like a dictionary of antiquities. As to the second, its obscurity passed into a proverb even in ancient times. More truly typical of the age are the so-called "didactic epics" of Aratus on astronomy and meteorology (afterwards translated into Latin by Cicero), and that of Nicander of Colophon on cures for poison and the bites of venomous creatures. As time went on, the literary work of the Alexandrians became more and more pedantic and far less imbued with the spirit of pure literature, until it came to an end not far from the beginning of the Christian era.²

The Alexandrian Philosophy was always characterised by eclecticism. It originated nothing. The most interesting school that arose in Egypt after the Library became established was Jewish or was, at any rate, due largely to the influence of Jewish rabbis who began to widen their religious teaching, so as to admit into it some of the philosophical conceptions of the earlier Greeks. The result was a body of semi-religious doctrine in which philosophy and theology were superficially harmonised. The most elaborate expounder of this harmony was Aristobulus, an Alexandrian Jew (c. 180 B.C.) whose commentaries on the Mosaic Books, dedicated to Ptolemy Philometor, sought to show that the main teach-

¹ Suidas called it a "poem of shadows." The scholia by Tzetzes are however, very valuable.

² See Couat, La Poésie Alexandrine (Paris, 1882).

ings of Greek philosophers, especially those of Plato and Aristotle, were derived from the Pentateuch. Three centuries later, when the influence of Christianity began to be felt, Neo-Platonism was thereby modified; but the later Neo-Platonists were hostile to Christianity; and their system, in the hands of Iamblichus and Julian the Apostate, was set forth as a substitute both for Christianity and the older pagan faith.¹

In the Pure and Applied Sciences, the achievements of the Alexandrians lie somewhat beyond the strict limits of classical philology. It may, however, be well to enumerate some striking results which were attained. These comprise the measurement of the sun and moon by Aristarchus of Samos (310-250 B.C.); the first systematic treatise on geometry by Euclid (c. 300 B.C.); the development of the geometry of three dimensions by Archimedes (287-212 B.C.), as well as the first application of mathematics to hydrostatics by the same scholar; the first scientific treatise on conic sections by Apollonius of Perga (260-200 B.C.); the working out by Eratosthenes (275-104) B.C.) of what was later called the Julian Calendar; the determination of the true length of the solar year (within six minutes) by Hipparchus (c. 160 B.C.), after whom no real advance in astronomy was made until the time of Copernicus, some sixteen hundred years later; the

¹ See Kingsley, op. cit.; and Whittaker, The Neo-Platonists (Cambridge, 1901).

invention of trigonometry, also by Hipparchus; and finaly, the construction of the fire-engine, the steam-engine, the nickel-in-the-slot machine, and many curious mechanical toys by Hero (c. 125 B.C.), to whom have also been ascribed writings on the solution of the quadratic equation and the introduction of algebra.¹

As Aristophanes was essentially the great φιλόλογος among the Alexandrians, so Aristarchus was essentially the great κριτικός of all antiquity. Born in Samothrace, he was a pupil of Aristophanes at Alexandria, where his stupendous labours as a critic of literature made his name afterwards, and even to this day, proverbial. It is with him that text criticism reached its highest development until recent times.

It is evident that the literary study of an author, pursued in a thorough and systematic way, will soon result in questions relating to the integrity of the text, especially when the author has been long dead and when there exist variant versions from which one has to choose. It has already been shown that something had been done previously toward the criticism of the Homeric texts and also the texts of the great dramatists. This work was now taken up at Alexandria in a spirit of scientific inquiry and with ample means for its prosecution. As time went on,

¹ See Berry, A Short History of Astronomy (London, 1899); Ball, Great Astronomers (New York, 1899); Ball, A History of Mathematics (London, 1901); Cajori, A History of Mathematics (New York, 1906);

a definite School of Criticism was established. The first librarian, Zenodotus of Ephesus, may be regarded as the founder of this school. The fact that his duties were partly those of a cataloguer, purchaser, and classifier led him to look with especial interest upon the work of making collections, so that one finds him preparing a sort of corpus of the epic and lyric poets and elaborating the Homeric glossary of Philetas into a more ambitious work. He also put forth an edition which may be called the very first scientific edition of both the Iliad and the Odyssey. It was published shortly before the year 274 B.C. Hence Zenodotus is called $\delta\iota o\rho\theta\omega\tau\eta_{S}$, and his work the $\delta\iota\delta\rho\theta\omega\sigma\iota_{S}$, or Recension.

In preparing the text of Homer, Zenodotus introduced four kinds of corrections: (1) Elimination, the complete omission of certain lines that he regarded as absolutely spurious; (2) Query, the marking of certain lines as very doubtful, though still not so doubtful as to justify their omission altogether; (3) Transposition, the rearrangement of the order of certain lines; (4) Emendation, the sub-

Fink, A History of Mathematics (Chicago, 1900); Hankel, Zur Geschichte der Mathematik im Alterthum und Mittelalter (Leipzig, 1874); and the treatise on Hiero's ingenious mechanical toys with drawings to illustrate them in Greenwood, Pneumatics (London, 1851). As to algebra, this was in reality an invention of the Egyptians. The first treatise on algebra dates back to the year 1700 B.C., when Ahmes, an Egyptian scribe, copied part of an algebraic work written eight hundred years before his time. The book of Ahmes has been edited by Eisenlohr (Leipzig, 1877).

stitution of new readings for the old. As was natural in a lexicographer, he paid great attention to the vocabulary of Homer, and his corrections appear to have been made chiefly upon the verbal side. His proof of what could be done by a minute study of word and phrase began a new era of philological study, and one in which language, as distinct from style, received a very close attention. The processes of text criticism now began to be extended to other texts than those of Homer. We have already mentioned the great edition of the tragic poets by Alexander Ætolus, and the edition of the comic poets by Lycophron. The Illvakes of Callimachus, previously spoken of, were really more than a catalogue of the books in the Alexandrian Library, since they contained critical observations on the genuineness of each volume, an indication of the first and last word of each, and a note regarding its size.2 This was essentially Bibliography employed in the service of criticism.

The third librarian, Eratosthenes, of whose scientific studies something has been already said, compiled a treatise on the Old Comedy in not less than twelve books. In it he seems to have given for the first time, not only a complete and critical treatment of the language and subject of the comedies, but also an exhaustive series of excursus on such themes as were of collateral interest and

¹ Examples of his corrections may be found in H. F. Clinton's *Fasti Hellenici*, iii. pp. 491 foll. (Oxford, 1824–1834).

² See Egger, Callimaque et l'Origine de la Bibliographie (Paris, no date).

importance, — e.g. the structure of theatres, the scenic apparatus, the actors, the costumes, the different kinds of elocution, and, in fact, everything pertaining to the general subject.¹

His successor, Aristophanes of Byzantium, availed himself fully of the material which was now at hand. The Alexandrian Library had already existed for an entire century, and it had been thoroughly sifted, arranged, and classified, so that there was needed only a great mind to put it to the best possible use. Much had already been done toward the establishment of some principles of criticism; but the results of previous successes and failures were now to be utilised to the full, and in a broad and liberal spirit. The whole sphere of Greek literature became a field for the labours of Aristophanes; and in taking upon himself so heavy a task, he set to work in a spirit of catholicity. His criticism was not wholly verbal, nor was it even wholly diplomatic, - that is, criticism based upon the comparison of manuscripts. It was both of these, and it was inspired and tempered by the sentiment critique. His σημεία were of various sorts. Ten of them were known as the δέκα προσφδίαι, or ten markings of Aristophanes. These were the two breathings, the three accents,² the two quantity marks (the long and the short),

¹ The fragments of his writings will be found in Berhardy, *Eratos-thenica* (Berlin, 1822).

² Breathings and accents, however, were not regularly written in Greek manuscripts earlier than the seventh century A.D.

the mark of separation inserted between words where the point of separation might not be obvious, the hyphen (a curved line drawn under the letters to show the connection, as in compound words), and finally, the apostrophe used either to mark elision or the end of a foreign name. It was regularly written after a word ending in κ , χ , ξ , ψ , or $\dot{\rho}$. When a double consonant was found in the middle of a word, an apostrophe was placed above the first or between the two letters.

Besides these, Aristophanes also made use of the full point or period, whose value depended upon its position. The high point was a full stop. The point on the line was a semicolon. The point in a middle position was a comma. The last disappeared from use in the ninth century A.D., when it was replaced by the mark which we now call a comma.

Aristophanes also edited critically a great number of texts. He prepared a supplement to the catalogue of Callimachus; he helped compose the Canon already given; he wrote a treatise on metres, and also the first scientific work on lexicography, of which about one hundred fragments are still preserved.¹

We need not dwell in detail upon the critical methods of Aristophanes, since they can be much better seen in the work of his remarkable pupil and associate, Aristar-

¹ The fragments of Aristophanes are edited by Nauck, Aristophanis Byzantii Fragmenta (Halle, 1848).

chus of Samothrace (c. 217–145 B.C.). He is the best type of the Alexandrian critic, since he confined himself to the single field of criticism and did not seek to be known as a polymath. He first completed the general terminology of formal grammar, setting forth the eight parts of speech — noun, verb, pronoun, adverb, participle, article, conjunction, and preposition.¹

Aristarchus finally determined the fixed critical principles that were to be applied in establishing the correct text of an author. These principles he employed in editions of Archilochus, Alcæus, Æschylus, Sophocles, Aristophanes, Hesiod, Pindar, and especially the Homeric poems, of which he published two great editions, writing notes on special points together with commentaries. It is in the editions ($\epsilon \kappa \delta \delta \sigma \epsilon \iota s$) that one can best judge of his ability as a critic, since in them the difficulties were far the greatest because of the long lapse of time, because of the large number of manuscripts, and because of the variations due to the preceding recensions. There were political interests involved in many of the changes made in the Homeric text, precisely as some earnest theologian must have made the famous interpolation in the New Testament to establish the doctrine of the Trinity (1 John,

¹ The interjection was not recognised by the Greeks as a part of speech. It came into formal grammar with the Roman teachers (Quint. i. parts 4. 20). The Alexandrians claimed that Homer recognised the eight parts of speech, and they cited two passages of the *Iliad* (i. 185 and xxii. 59) each of which contains them all.

v. 7).¹ It was probably because of his knowledge of these interpolations and of the reasons for them, that Aristarchus approached the work of recension in a sceptical spirit like that of F. A. Wolf in later times. His main purpose was to rid the text of the additions and corruptions of the three preceding centuries. It is interesting to note the details of his system, which can best be seen by taking up some of the concrete examples preserved for us in the Venetian scholia.

The examination of an author by Aristarchus involved five processes: (1) the arrangement of the text; (2) the determination of the accents; (3) the determination of forms; (4) an explanation of the words, allusions, etc.; and (5) $\kappa\rho l\sigma \iota s$, or criticism proper, including all questions of authenticity and the final judgment that is to be passed upon the author and his work as a whole.

In carrying out his work as a text critic, Aristarchus employs all the sources of information used by his predecessors, but always in a spirit far more scientific than theirs had been. Thus, like Zenodotus, he studies the Homeric use of words, holding with him that a knowledge of the substance must be based upon a knowledge of the language. Yet he does not confine himself to the archaic, rare, or foreign words. He, as an "analogist," 2 considers

¹ See Lehrs, De Aristarchi Studiis Homericis (Königsberg, 1833; 3d ed. 1882); Ludwich, Aristarchs Homerische Textkritik (Leipzig, 1884-1885); Jebb, Homer, pp. 91-98 (Glasgow, 1887).

² Infra, pp. 119-120.

these as being less important, from the very fact of their rarity, than the words and phrases that lend colour and individuality to the work as a whole and which, since they are familiar, give a clue to the Homeric sense. So, for example, Aristarchus remarks that in Homer, ὧδε always has the meaning "thus" and never "here" or "thither": that $\beta \dot{a} \lambda \lambda \epsilon \iota \nu$ refers always to the hurling of missiles, while οὐτάζειν is used of striking or wounding at close quarters; that $\phi \delta \beta$ os has the sense of "flight"; that $\pi \delta \nu$ os is employed especially in reference to combat; that 'Ολυμπος in the *Iliad* means the actual mountain, and so on. This careful study gave him a standard of usage when called upon to decide between two conflicting readings in two manuscripts of equal value; for in such a case he gave the preference to the reading that was the more consistent with the general usage of the poet $(\tau \delta)$ ἔθιμον τοῦ ποιητοῦ).

Again, in establishing his text, he ascribed great weight to manuscript authority, just as Zenodotus and Aristophanes had done before him; but Aristarchus exhibits an acuteness and system in his classification of the manuscripts not to be found in the work of his predecessors. He seems to have grouped them generally in "families," and to have determined both by comparison and by the internal evidence of a codex its value in the establishment of a canon. Thus we find "private editions," the work of individual editors; "city editions,"

made under State supervision; and "popular editions," among which he distinguishes those that are more inaccurate and those which are fairly accurate.

That Aristarchus made no such minute divisions and subdivisions of manuscripts in their "families" and "groups" as are found in the work of modern critics in texts like that of Horace, for example, is due to the important fact that in his time the variants in Homer were variants of words and particular verses; while the limits of divergence being very narrow, the omissions and additions were of a comparatively unimportant kind. This implies a common basis of tradition, embodied in a vulgate text, possibly that of the Pisistratidean recension. The better judgment of Aristarchus, as contrasted with Zenodotus, is seen in his treatment of the so-called formulaic lines. This repetition, line for line, was too much for Zenodotus, who rejected the frequent appearance of it, for instance, in the Iliad, where the "baneful dream" of Zeus to Agamemnon occurs three times in the second book. Aristarchus, however, rightly saw in this the naïf redundacy of the primitive story-teller, and so he let it stand. On the whole, though Aristarchus was sceptical, he was very much averse to altering his text; and for this conservatism he has been censured in modern times, for instance, by Wolf and Lehrs. Aristarchus questioned and doubted, but he did not often introduce an emendation.

In his critical work he employed various signs $(\sigma \eta \mu \epsilon \hat{\imath} a)$. The most important of these were

- (1) The $\partial \beta \epsilon \lambda \delta s$ or spit, -, to indicate that a line was spurious. Such lines were said to be "athetised" $(\dot{\alpha}\theta \epsilon \tau \epsilon \hat{\imath}\nu)$. This obelus is still used in critical texts by German scholars.
- (2) The $\delta \iota \pi \lambda \hat{\eta}$, ξ , or \Rightarrow , used either for exposition, to call attention to some especial point, or to mark a word which is used only once, or to indicate that the construction is the same as in Attic Greek.
- (3) The dotted diplê, ξ , to denote that the reading adopted by Aristarchus differed from that of Zenodotus.
- (4) The asterisk, *, to mark a genuine formulaic verse as distinct from one regarded by him as spurious. If the repeated verse was spurious, it was marked in one of the two places where it occurred, with the asterisk or the obelus prefixed to the line.
- (5) The antisigma, \supset , and the stigma, r, were used together to denote repetitions of the same idea. The stigma, alone, denoted only suspected spuriousness. It is interesting to know that out of the 15,600 lines of the *Iliad* and the *Odyssey*, 1160 were athetised.

The criticisms of Aristarchus were not, apparently, embodied in any one great standard work, but were spread

¹ For instance, *Iliad*, viii. 535-537, was marked, and so was passage 538-541, because the last-named verses seemed to repeat the sense of the former. For the best account of these critical signs see Gardthausen, *Paläographie*, p. 288 foll. (Leipzig, 1899) and Susemihl, *op. cit.* ip. 432 foll.

over a great quantity of monographs, marking each the development of a new line of research or the statement of a new principle. Hence it is that his critical work never was canonised in one single standard text. Hence, also, it is so difficult to distinguish what is the work of Aristarchus himself from that which belonged to the Aristarchean School,—to the great number of students and scholars who carried out his ideas. This difficulty, in fact, was felt even in ancient times, as in the Augustan Age; and we find Didymus Chalcenteros trying to ascertain what readings of Homer were approved by Aristarchus—and this only about a century after his death.

The imperfect knowledge that we have of the critical work of Aristarchus as a whole is due to the roundabout way in which notices of it have come down to us. Didymus, just mentioned, collected the Homeric writings of Aristarchus. Aristonicus of Alexandria, a contemporary of Didymus, wrote a treatise on the critical signs employed by Aristarchus in his text work; and in connection with this matter, incidentally quoted the arguments relating to the verses marked with these signs. About the year B.C. 160, Herodianus wrote a treatise on the accentuation and prosody of the Homeric poems. Nicanor about the same time improved a work on Homeric punctuation. Now between the years 200 and 250 A.D. some unknown scholar made an epitome of these four writers — Didymus, Aristonicus, Herodianus, and Nicanor — in such a way

as to form a continuous critical commentary on the Homeric text. The Epitome of the Four Treatises (usually spoken of simply as "the Epitome," and in Germany as the Viermänner Scholien), was in the tenth century A.D. copied into the margin of a codex of the *Iliad*. This Codex is the very famous Codex Venetus A of the *Iliad*, No. 454, in the Library of St. Mark in Venice. It contains (1) the Epitome, undoubtedly somewhat altered from its original form, as the language, etc., shows; and (2) other scholia. This MS. is almost the only source from which we can get any definite knowledge in detail of the views of Aristarchus. It is also the only MS. preserved in which the critical signs of Aristarchus are employed. The scholia of this Codex were first edited by Villoison in 1788.

Text criticism in antiquity reached its highest point with Aristarchus. His followers were often men of great ability and indefatigable industry, but their attention seems to have been directed more minutely to verbal, *i.e.* grammatical criticism, and to have become narrower and more pedantic as time went on. The Alexandian School was, in fact, essentially a school of grammatical scholarship, accurate, careful, and deeply learned, but with perhaps too great a fondness for regularity, for strict rules, and a sort of Procrustean willingness to secure absolute uniformity in language and in its laws by crushing out that idio-

¹ See Hübner's *Encyclopädie*, pp. 37-40 in the second ed. (Berlin, 1892).

matic freedom of both form and expression which is the essential attribute of a living language.

After Aristarchus, who died about 143 B.C., critical studies were continued at Alexandria by his successors, among whom may be noted Hermippus of Smyrna, a writer of biographies, much drawn upon by Plutarch; Apollodorus of Athens, who wrote in trimeters, a work on chronology from the fall of Troy to 1444 B.C., and a commentary on the Homeric catalogue of the ships. He likewise composed a treatise On the Gods in twenty-four books which was a treasury of minute and curious information "freely and extensively pirated by later writers." The successor of Aristarchus was Ammonius, who had been his pupil; and after him came Didymus Chalcenteros of Alexandria (c. 65 B.C. -c. 10 A.D.), who is said to have written nearly four thousand books, lexicographical, critical, grammatical, exegetical, and archæological.1 About the year 75 B.C. there appeared anonymously a great manual of mythology — the first of its kind — from which many of the later writers drew extensively. One should also speak of the grammarian Tryphon, and the commentator Theon who lived in the first century A.D. The Alexandrian School grew less and less important after the middle of the first century B.C. A good part of the Library was destroyed during the siege of Alexandria by Julius

¹ See Blau, *De Aristarchi Discipulis* (Jena, 1883); and the edition of the fragments of Didymus by Moritz Schmidt (Leipzig, 1854).

Cæsar (47 B.C.). Later, when Theodosius the Great gave his consent to the destruction of all the pagan temples in the Roman Empire (389 A.D.), a mob of fanatical Christians demolished the temple of Jupiter Serapis, and with it a large portion of the Library. From this time, Alexandria, as a centre of learning, ceased to exist; and when the Arabs in 641 took the city, they merely completed a work of devastation that had been going on for centuries.

[Bibliography. — See, in addition to the works already cited, Susemihl, Geschichte der griechischen Litteratur in der Alexandrinerzeit, 2 vols. (Leipzig, 1891–1892); Bernhardy, Geschichte der griechischen Litteratur, 5th ed. (Halle, 1877–1892); Renan, Mêlange d'Histoire et de Voyages dans l'Antiquité, pp. 389–410, 427–440 (Paris, 1898); and the special biographical articles in Pauly's Real-Encyclopädie (Stuttgart, 1893 foll.); also Mahaffy, History of Classical Greek Literature, vol. i. pp. 35 foll. and vol. ii. pp. 427–438 (New York, 1880).]

B. THE PERGAMENE SCHOOL AND OTHER CENTRES OF LEARNING

The School at Alexandria had for a long time attracted those who were at once men of genius and of profound learning. After the death of Aristarchus, however, it tended to become more and more a gathering-place for near-sighted critics to whom formulas were more important than facts. To them a rule of grammar or a paradigm was sacred, and their reverence for symmetry in language was carried so far as to provoke an inevitable opposition,

which was organised at last in the famous School at Pergamum, which arose to meet and assail the theories of the Alexandrians. Pergamum was an ancient town, about fifteen miles from the coast of Mysia in Asia Minor. It was ruled by a dynasty founded in the Alexandrian Age; and in 263 B.C. Eumenes I became a patron of the arts and sciences, inviting philosophers and sculptors to his court, among them being Arcesilaus, who had first presided over the Middle Academy at Athens, and the Peripatetic philosopher Lycon. The successor of Eumenes was Attalus I, who assumed the title of king, won victories over the invading Gauls, and then began to gather the books for the Pergamene Library that was to rival the collection at Alexandria. He laid out grounds for an academy like that in Athens, and sought the friendship of philosophers, historians, and mathematicians.2 The king himself condescended to authorship, though his taste was more for sculpture. His victories over the Gauls were commemorated in a set of magnificent bronzes. A copy of one of these in marble is the famous figure known as "the Dying Gladiator," but more properly "the Dying Gaul," and now preserved in the Capitoline Museum at Rome. Of the artists whom he patronised, one recalls especially Antigonus of Carystos, who wrote on art and likewise

¹ The name for parchment (pergamena) is derived from Pergamum, where it was first made.

² It was to King Attalus that Apollonius of Perga dedicated his work on Conic Sections.

on natural phenomena. Pergamum was adorned with splendid buildings, above which rose the Acropolis, a thousand feet above the sea level, and protecting, as it were, the court of the goddess Athena, a vast quadrangle bounded by colonnades and adorned by majestic statues of Homer, Herodotus, Alcæus, and other great writers of the past. These and similar works were carried out by the kings of Pergamum until in 133 B.C. Attalus III bequeathed his entire realm to the Roman people.

The scholars of Pergamum were, on the whole, more varied in their interest than those of Alexandria. The Stoics controlled the teachings, and the real founder was Crates of Mallos (c. 168 B.C.), who became to the Pergamene School what Aristarchus was to the Alexandrian. Aristarchus reverenced rule in language, while Crates based his teachings upon exception; and the catchwords which represented the distinction were avalogia and avalogia. Crates and his followers regarded the mere verbalists of Alexandria with a species of contempt. He held that text criticism, and especially the text criticism of Homer,

¹ Crates derived the expression ἀνωμαλία from the treatise of Chrysippus, On Anomaly. The fragments of Crates with a commentary on them will be found in Wachsmuth, De Cratete Mallota (Leipzig, 1860); and on the Pergamene School see Wegener, De Aula Attalica (Copenhagen, 1836). For some discussion on Analogy and Anomaly, see Aulus Gellius, ii. 5, where reference is directly made to Aristarchus and Crates. " Åνωλογία est similium similis declinatio; ... άνωμαλία est inaqualitas declinationum consuetudinem sequens." On Analogy and Anomaly, see also Sandys, op. cit. i. pp. 156–158.

ought to embrace the whole mass of problems — historical, physical, mythological, and philosophical — suggested in the Homeric poems. He saw in the text, allegories and allusions to the cosmical and astronomical theories of the Stoics. In fact, he regarded Homer more as a teacher than as a poet, placing his διδασκαλία before his ψυχαγωγία. The importance of this view of Crates is found in the fact that because of his desire to read into the text the allegories which he saw there, he was led to propose a large number of conjectural emendations in which the principle of anomaly gave full play to his ingenious mind. Thus, while Aristarchus represents cautious diplomatic examination of the text and a reluctance to alter what he finds in it, Crates is the type of the brilliant conjectural emendator, the Bentley of antiquity. Only fragments have come down to us of his writings; but they include a commentary on the Homeric epics, on Hesiod, Euripides, and Aristophanes; a catalogue of the Pergamene Library like that which Callimachus made of the Library of Alexandria; and a work on the Attic dialect in at least five books. may be noted, en passant, that Crates laid the foundation of the study of grammar at Rome, to which city he was sent as an ambassador in 157 B.C.1 His most important successor was Demetrius Magnes, who flourished in the first century B.C. and who wrote on synonyms together with some biographies.

¹See infra, p. 157.

It might well be assumed that Athens should have been the seat of a great institution of learning; and such was indeed the case. So far back as the time of Pericles. it had been called "the school of Greece," and even in its decadence it long kept the fire of learning bright. Both before and immediately after the beginning of the Christian Era, it contained an organised faculty of accomplished professors who lectured to students from all parts of the civilised world. The University at Athens was the result of two previously existing institutions - the organisation of the $\tilde{\epsilon}\phi\eta\rho\sigma\iota$, and the schools of the philosophers and Sophists. The Ephebi, or free Athenian youths, were in early times enrolled into a corps that was primarily intended for the defense of the State. They were educated both physically and mentally, and they formed the nucleus of what became the student body of the university. Two changes in the constitution of this body prepared the way for its transformation from a quasi-military organisation to a university. These changes were: -

- (r) The neglect of the principle of compulsion. Not all were enrolled, but only those who chose.
- (2) Membership was no longer confined to Athenians or even Greeks.

These changes left a body of young men, organised and regularly enrolled, free to follow such a course of training as best suited their inclinations and capacities, and ready to be turned to any line of study that had the advocacy of brilliant, energetic, and popular men. The schools of the philosophers supplied the influence necessary for completing the change from a military college to a great university.

Four schools of philosophy had since the time of the Macedonian wars been flourishing at Athens. These were the Academic or Platonic School, the Peripatetic or Aristotelian School, the Stoic School, and the Epicurean. Each of these schools from the time of its foundation had received an endowment sufficient to maintain and perpetuate it. Plato had purchased a small garden near the Eleusinian Way, in the grove of Academe, for three thousand drachmas. His philosophic successors, Xenocrates and Polemon, continued to teach in the same spot; their wealthy pupils and the friends of learning added to the grounds and bequeathed sufficient funds for the support of the philosopher, and thus practically endowed an academic chair. In like manner, Aristotle left to his successor, Theophrastus, the valuable property near the Ilyssus; and Theophrastus, in the will whose text has come down to us in Diogenes Laërtius, completed the permanent endowment of the Peripatetic chair. So Epicurus left his property in the Ceramicus to be the nucleus of an endowment for his school,² and the Stoics were probably in like manner made independent. Around these four schools of phi-

¹ V. 2. I4.

² Diog. Laërt. xx. 10.

losophy, which, being endowed, taught gratuitously, a multitude of teachers of rhetoric, grammar, literature, logic, physics, and mathematics clustered. The world soon learned to think of Athens as a great seat of learning and culture, brilliant and renowned. Students flocked to her from every quarter and country. It appears to have been necessary to become enrolled among the Ephebi, but the scholars selected for themselves their own instructors, and attended such lectures as they chose. The number of these students became enormous. Theophrastus alone lectured to as many as two thousand men. The records show the names of many foreign students, some of them being of the Semitic race. From later sources we learn that matriculation took place early in the year; that the students wore a gown like that of the undergraduates at the English universities; that they pursued athletic sports with much ardour; that at the theatre a special gallery was reserved for them; that certificates of attendance at the courses of lectures were required; that they were under the general direction of a president; that fees were exacted in the shape of an annual contribution to the university Library; that breaches of discipline were punished, as at Oxford, by fines; that the relation between student and professor was very close, so that for a student to cease to take a course was very cutting; and that the students themselves "touted" for the professors. "Most of the young enthusiasts for learning," says Gregory Nazianzen,

"became mere partisans of their professors. They are all anxiety to get their audiences larger and their fees increased. This they carry to portentous lengths. They post themselves over the city at the beginning of the year; as each newcomer disembarks he falls into their hands; they carry him off at once to the house of some countryman or friend who is best at trumpeting the praises of his own professor."

Private tutors ($\phi \acute{\nu} \lambda a \kappa \epsilon s$) were often employed. They looked over the students' notes, "coached" them on the subjects in which they were most interested, and helped them at their exercises. At the end of the year there seems to have been an examination.

Freshmen seem to have been subject to a sort of hazing. Gregory, in a funeral address over his friend Basil, recalls some of the memories of their sport with freshmen. We find one of the professors, Proæresius, asking his class not to haze a new student, Eunaphius, because of his feeble health. Sometimes the inferior officers of the university were subject to similar annoyances, and Libanius tells of one of the tutors who was tossed in a blanket.

There were likewise other famous schools given over to the higher education in the East and in the West. Æschines, the great rival of Demosthenes, is said to have founded a school for oratory in the island of Rhodes, and there were famous teachers in Lesbos. Tarsus, in Asia Minor, had faculties representing all the branches of humanistic studies. In like manner, Massilia (Marseilles) rivalled even Athens and drew students away from it. The further development of endowed education will be spoken of as belonging more particularly to the Græco-Roman Period.¹

After the time of Didymus Chalcenteros, already noted, there is nothing in the history of text criticism among the Greeks that needs especial mention. As men of genius became rarer, formal grammar, lexicography, and the epitomising of earlier writings occupied the time of those whose minds were satisfied with the purely mechanical phases of scholarship. To this later age we owe the great collections of Scholia that have come down to us from the codices of classical authors and that are important (1) because of their value in determining the true reading of the classical texts; and (2) because in many cases, by reason of the blunders of subsequent scribes, they have sometimes slipped into the text itself, there to become a source of learned controversy. A note on the ancient glosses may be of some value for reference in speaking of text criticism hereafter. This will necessarily anticipate a portion of the narrative; but it is best considered in this place.

¹ See Capes, University Life in Ancient Athens (London, 1877); Mahaffy, Old Greek Education (London, 1882); Eckstein, Lateinischer und Griechischer Unterricht (Leipzig, 1887); Wilkins, National Education in Greece in the Fourth Century before Christ (London, 1873); and the first five chapters in Walden, The Universities of Ancient Greece (New York, 1909).

A gloss $(\gamma \lambda \hat{\omega} \sigma \sigma a)$ was, in the language of the Greek critics and grammarians, the name given to a word in the text that required explanation, e.g. κορεσσιφορήτους in Il. viii. 527. In course of time, ordinary words may become obsolete or may acquire a new shade of meaning, or may be employed in a technical and peculiar sense. As these words would require a special explanation for the benefit of the general reader, the name $\gamma \lambda \hat{\omega} \sigma \sigma a$ was given to all such. Thus, Plutarch speaks of the words which belong to the purely poetical language, and those that are purely local, as γλώτται (De Audiendis Poetis, § 6). Galen applies the term to the obsolete medical expressions of Hipparchus. Aristotle uses it of provincialisms (Poet. 21. 4-6).1 Quintilian employs the synonymous term γλωσσήματα to voces minus usitatas (i. 8. 15; cf. i. l. 35). Originally the word that needed explanation was simply defined by writing its simpler synonym, the word in common use (ὄνομα κύριον, Arist.), in the margin of the text beside it. Then the term $\gamma \lambda \hat{\omega} \sigma \sigma a$ meant the pair of words, i.e. the word in the text and its explanatory word in the margin, the two being viewed as constituting a whole. Ultimately the explanation alone was called $\gamma \lambda \hat{\omega} \sigma \sigma a$. With these glosses begins the history of lexicography; but the glosses soon ceased to be purely lexical and became encyclopædic in character, - geographical, biographical, historical, or

¹ Cf. *id. Rhet.* iii. 3. 2. As early as the fifth century B.C., we find glosses spoken of, since Democritus of Abdera (c. 410 B.C.) wrote a treatise on them ($\Pi e \rho l \Gamma \lambda \omega \sigma \sigma \epsilon \omega \nu$).

philological, according to the purpose or the tastes of the glossographer. The chief of these glossographers we have already mentioned, - Philetas of Cos, Zenodotus, Aristophanes of Byzantium, Aristarchus, Crates, and Herodianus.¹ In later times, the glosses were regularly collected and arranged as running commentaries on the language of the text, — the best-known collectors of these being Hesychius, Photius, Zonaras, Suidas, and the compiler of the Etymologicum Magnum. In its developed meaning, the word "gloss" is to be understood in the same sense as scholium. Very few scholia have come down to us with the author's name attached; but such as exist are usually written upon the margin or between the lines of a codex and copied from the work of the earlier scholiasts. The scholia generally bear evidence of having been written much later than the date when the codex itself was written. Scholia in the margin are known as glossæ marginales; those written between the lines are called glossæ interlineares.2

Something must be said here of the study of Art among the Greeks. So far as any evidence remains, their early writings on this theme must have been very limited in extent so far as they concern æsthetics. There is

¹ Athenæus, writing about the year 250 A.D., alluded to thirty-five glossographers.

² See Matthai, Glossaria Graeca (Moscow, 1774-1775); a list of the most important (Gk.) scholia is given by Gudeman, op. cit. pp. 20-21. Cf. also Hübner, Encyclop. pp. 37-40, 2d ed. (Berlin, 1892).

scarcely a mention of any formal discussion on the history of architecture, sculpture, painting, or music. The historians, and also the philosophers, merely give, in an incidental way, detached and inadequate suggestions as to art, artists, and works of art. As in literature, so in music, the Greeks of the Præ-Alexandrian Age devoted themselves more to creation than to criticism. Philostratus remarks, however, in the first book of his Lives of the Sophists, that Hippias (c. 420 B.C.) of Elis was wont to dispute on the subject of painting and sculpture; and that Democritus of Abdera wrote a work on painting from the living model ($\Pi \epsilon \rho \lambda Z \omega \gamma \rho a \phi \lambda a$ s). Other treatises, of which we know, were practical in their character and were written by artists for artists, regarding the "canon" or mathematical demonstration of those proportions which produce beauty in the human form.1 There are, however, acute criticisms of painting scattered throughout the writings of Aristotle; and by the beginning of the Alexandrian Period, we come to criticisms which are not technical but æsthetic. Thus, Duris of Samos was among the first to collect anecdotes and aphorisms with regard to painting. Many representatives of the Peripatetic School busied themselves

¹ The first of these canons was that of Polyclitus in the fifth century B.C. After Polyclitus, came many to write upon the technical side of sculpture; but not until after Aristotle was there much written on the æsthetics of the plastic and graphic arts. Vitruvius in the preface to his seventh book names a number of writers who concerned themselves with the principles of artistic symmetry.

in the same way. As a rule, the artists themselves — men who understood sculpture and bronze casting — were the authors of these treatises. At Pergamum, in particular, much attention was paid to sculpture, as we have already seen, and it was there that the Canon of Ten Sculptors 1 was probably drawn up to match the Alexandrian Canon of the Ten Orators. Most of our information with regard to these early writers comes from Roman scholars, especially from Pliny the Elder; or else from late Greek writers such as Strabo and Pausanius and Lucian.²

¹ Quintilian, xii. 10. 7.

² See Jones, Select Passages from Ancient Writers Illustrative of the History of Greek Sculpture (London, 1895); Overbeck, Geschichte der griechischen Plastik (Leipzig, 1894); and Fowler and Wheeler, Greek Archaeology. (New York, 1909).

TV

THE GRÆCO-ROMAN PERIOD

TRADITION ascribes the date of the founding of Rome to the eighth century B.C. It was long, however, before the Roman people either acquired or attained anything that deserves the name of literary culture, polite learning, or philological study. Unlike the Greeks, the Romans were a rugged race, an inland race, apart from the magic and the mystery of the sea. The small settlement along the Tiber was pastoral and agricultural for many centuries, having little commerce with external peoples, dwelling in constant danger from formidable neighbours, against whom it could prevail only by the strictest discipline and the intensest concentration of interest. Thus, the Romans came to possess the civic virtues in a high degree. Primarily, their ideal was efficiency, intelligent cooperation, and a love of the concrete. Their patriciate was formed of the fighting men. Their arts were arts relating to military science and statesmanship and religion. distinctive quality which they possessed was a wonderful tenacity of purpose. Later, when they had vanquished their enemies throughout Italy and had builded a great nation, the characteristics which had been wrought out in them by centuries of toil and effort were to be seen not

only in what they created, but in what they took from others and transmuted into something that became almost purely Roman.¹

By the fourth century B.C. they were reaching the point where a literature of their own was beginning to display an evolution quite independent of any impulse from without. Their annals were set down in simple prose. laws were expressed precisely and with clearness. indeed, quite characteristic of the difference between the Greeks and the Romans that Greek children should have been set to learn by heart long passages from the Homeric poems, while Roman children were compelled to memorise the Laws of the Twelve Tables. Yet there were at Rome at least the beginnings of poetical composition in lyrics sung in artless rhythms. Lyric Poetry at Rome was first found, not as an exotic, but in the neniæ, the spells, the charms, the lullabies that were crooned over little children, and in other songs that were chanted to the accompaniment of the dance.2 A native Drama — a sort of extemporaneous comedy — was not unknown. We find even the traces of a gradual drift away from the ancient versus Italicus to the more regular

¹ See Pais, Ancient Legends of Roman History, Eng. trans., pp. 1-59 (New York, 1905); Michaut, Le Génie Latin (Paris, 1900); and Weise, Charakteristik der lateinischen Sprache (Leipzig, 1905).

² See the pages on very early Latin — the hymns, the litanies, the folk-poetry, the priestly literature, and the legal writings — in Duff, A Literary History of Rome, pp. 63-89 (London and Leipzig, 1909). See also Dedouvres, Les Latins, pp. 30-79 (Paris, 1903).

form of the Saturnian measure. This last, though it was often rude, was capable of a really artistic treatment, and it was to the early Romans what the dactylic hexameter was to the early Greeks. Nor is there any doubt that Oratory was fairly well developed, since oratory, as has been rightly said, belongs to "the literature that tends to statesmanship." Eloquence was necessary for the senator, or the popular leader, and it was necessary also for the commander of an army in the field. Therefore we can reasonably assert that even had Rome not come into contact with Hellenic influences, there would still have been created, slowly, but quite surely, not only a literature but a learning, absolutely Roman both in form and content.²

There had been some desultory relations between the Romans and the Greeks farther back than is recorded by authentic history. From the Chalcidian Greeks of Campania the Romans had borrowed their Alphabet.³ From the Etruscans also the Romans had acquired certain

¹ The earliest Roman oration written out for publication almost antedates formal Roman poetry. It was delivered in 280 B.C. by Appius Claudius against the terms of peace offered by Pyrrhus, and was read and studied at Rome for at least two centuries. See Sears, op. cit., p. 94.

² See Ihne, Early Rome (New York, 1902); Mommsen, A History of Rome (Eng. trans.) vol. ii, pp. 23-315 (New York, 1903-05); and the early chapters of Bernhardy, Grundriss der römischen Litteratur, 5th ed., (Brunswick, 1875).

⁸ See Lindsay, The Latin Language, pp. 1-12 (Oxford, 1894); Peters, "Recent Theories of the Alphabet," in vol. xxi, Journal of the Oriental Society (1901); and Clodd, The Story of the Alphabet (New York, 1903).

religious beliefs and practices as well as arts. But when the Roman arms advanced southward and began to conquer the Greek cities of Magna Græcia and Sicily, then there came a direct contact with Hellenic culture. This was in the early part of the third century B.C. At that time, the Romans, in their war with the Greek king Pyrrhus, overran the luxurious towns of southern Italy and seized the rich and splendid city of Tarentum. The knowledge which thus came to them of the magnificence of Greece was a startling revelation. To the rough soldiers, and rustic cultivators of Latium, Greek art, Greek science and Greek literature and learning became realities to fascinate and to encourage imitation. Little by little there sprang up in Rome a sort of Græcomania comparable with the Etruscomania of the later imperial age and with the successive Gallomania and Anglomania of our own country in the last century. The Romans learned the sister language, and many of them spoke and wrote it in preference to their own; while men of genius adapted the still rude Latin tongue to the varied forms of Hellenic literature. Not long afterward, the First and Second Punic Wars burst forever the bonds of Roman isolation. Because of them the Roman people gained an outlook that was not Roman merely, nor even Latin and Italian, but in the end broadly cosmopolitan. As by a flash, Rome saw at once what high civilisation and exquisite culture really meant. In a single generation, Greece gave to

Rome the treasures which she had been garnering for centuries. The effect upon the whole subsequent development of the Roman people was profound and lasting. The ablest minds among them grasped the significance of the revelation. Men like the Scipios and the Metelli welcomed the graces of life. By this time there was a so-called Greek set which grew in influence, despite the gibes and sneers of Cato and other partisans of the ancient order. In time, thousands of captive Greeks, including men of the highest attainments, were scattered over Italy as hostages, ambassadors, and teachers.

The first evidence of Hellenic Influence is probably to be found in literature when Livius Andronicus (c. 250 B.C.), by birth a Greek, was brought as a slave to Rome, and, after receiving his freedom, made a living by teaching his native language. It was he who translated the Odyssey into Saturnian verse. It was a rude and uninspired piece of work, yet for generations it remained a schoolbook for Roman boys and girls. In 240 B.C. he set upon the stage the first of many dramas which he laboriously constructed after Grecian models. He likewise attempted lyric poetry, being commissioned by the State to write a hymn in honour of Juno.¹ Gnæus Nævius, who was freeborn and the citi-

¹ See Ribbeck, Geschichte der römischen Dichtung, 2d ed., i, p. 15 foll. (Leipzig, 1897–1900); and Mommsen, History of Rome, Eng. trans., ii, p. 498 (New York, 1903); the chapter in Mackail's Latin Literature (New York, 1907); and that on "The Earliest Italian Literature" in Nettleship, Essays in Latin Literature (Oxford, 1885).

zen of a Latin town in Campania, really marks the beginning of Latin literature. He was no foreign sycophant, but had the independent spirit of his race. He wrote much, adapting often from the Greek, but also producing dramas based upon Roman history. In these and elsewhere he did not hesitate to attack the most powerful patricians, especially the Metelli. For this, in the end, he was imprisoned and banished and died in exile. He was, in truth, a Roman of the Romans. He clung to the native Saturnian verse, and in his Punica, writing of the First Punic War, he introduced that legend which links the Trojan Æneas with Roman history. Thus, he was the precursor of Vergil, for his Epic was long read, and parts of it are embedded in the Æneid.1 To Nævius are also due the beginnings of Satire, whereof Quintilian long afterward remarked that "satire, indeed, is wholly ours." Not only did Nævius use the native Saturnian verse, but he held fast to the Roman love of alliteration and repetition which were distasteful to the Greek poets; 2 so that when he died he left behind him a mass of literature which was neither Greek nor imitated from the Greek, but was rather Roman in spirit and in form. He and those who followed him prove that if Rome had never felt the deft touch of the

¹ Quintilian, x, 1, 93. Also, on the Roman satire, Nettleship, Lectures and Essays (second series), pp. 24-43 (Oxford, 1895).

² On alliteration, see Bötticher, De Alliterationis apud Romanos Vi et Usu (Berlin, 1884); and on dynamic repetition, Abbott, The Use of Repetition in Latin (Chicago, 1902).

Hellene, it would still have given birth to prose and verse worthy of a great nation. Professor Duff has rightly said, in speaking of this Roman strain, which is never missing:—

This native literature, then, is often cumbersome, and as yet lacks the highest distinction of style and grace, but is no less often solemn and dignified—it is always masculine. However powerful and brilliant the incoming Hellenic influence, these pre-Hellenic products of Rome must not be disdained as feeble and disconnected with the literature that was to follow. Impotence cannot create; and this early work had issue. It contained the germs of later success. Genius cannot be borrowed: it can be modified and developed. Above all, it can borrow, and make the loan its own. That was the case with Rome.

In truth, no nation possessing the power of growth, endued with energy, and able to make history, can long remain in its literature a mere imitator. In a thousand directions it must strike out for itself, conquering its own difficulties, fulfilling its own ambitions, and achieving great things which alter its own character. Since, then, literature is a mirror to reflect this character and the achievements that are allied with it, it will soon reflect the interplay of myriad forces, the presence of innumerable cross-currents, the perpetual shifting and changing of the golden sands of thought. For a while it remains in leading-strings, but after a time it will evolve its own masterpieces and will work them out in its own way. Let us take an example from modern times and compare the literature of England with that of the United States.

¹ Duff, op. cit., p. q1.

The language of the two nations is the same, but Americans were at first too much cumbered with material affairs to attempt in any serious way the literary art. They read English books or they imitated them in a pathetically humble fashion. But in time, after the Republic had shaken off its political bonds and had developed new interests of its own, its literature began to show that it, too, was attaining independence. It found new themes and it had new modes of treating them. One sees the first departure from the English model in Irving and in Cooper. After that, and when the young nation had grown conscious of his own power, there arose authors such as Emerson and Thoreau, Walt Whitman, Bret Harte, Clemens, Howells and a score of others who were American to the very core in all they wrote.

And so in Rome the imitative period lasted only a very little time. In the feeble, creeping, childish sense, it ends with Gnæus Nævius, and soon afterward there bursts forth into full flower a literature whose technique came from Hellas, but whose spirit and character were Roman. Latin literature, in fact, was revolutionised by two men, both of Italian birth, who by their genius gave to Latin the initial impulse which freed it forever from any slavish subservience to the Greek. The earlier language in which Livius Andronicus wrote his stumbling measures, and which even Nævius used clumsily, though with force, lacked that lightness and mobility which would

make it fit for poetry and for the finest prose. It lacked also an ampler and fuller vocabulary which should give both to the poet and to the prose writer a more varied instrument of expression. It was Quintus Ennius (239-c. 172 B.C.) who made the Latin language fit for noble poetry; and it was Titus Maccius Plautus (c. 254-184 B.C.) who gave it a wealth of new words, which, to be sure, in his time did not all win general acceptance, but which in a later century received the approval of the still greater master, Cicero.

Like Livius Andronicus, Ennius was a teacher; and like Livius, his personal influence helped to make his literary innovations successful, — a circumstance also due to the tact and linguistic skill shown in everything he did. Ennius held precisely the position in the Roman world to give weight to his teaching and example. He had personally trained in letters many of the young nobles who were taking their places at the head of the State. He was the intimate friend of several of the Scipios, and he has been said to have taught Greek even to the Elder Cato, who was famous for his hatred of all that was Greek. Ennius was himself a man of most engaging personal qualities, well-read, genial, courteous, and refined; and with these natural gifts and artificial advantages, he carried forward the work of Nævius. His sensitive ear and correct taste rebelled against the heavy and lumbering verses which were at first his models and which were the

best that could be written under the limitations of the language as it had hitherto been used for literary purposes. He set himself the task of infusing into it some of the Greek lightness, the Greek smoothness, and the Greek grace. The greatest obstacles in the way of this were two: first, the obstinate adherence by his predecessors to the natural or word-accent, which kept the verse on the level of prose; and second (partly because of this accentual limitation), the extraordinary number of long syllables.1 He now attempted an experiment that was destined to give to Roman literature not only stateliness but style. With much sagacity he refrained from making any innovations in iambic and trochaic poetry. There, tradition had already established a usage which he did not care to combat; but he turned to an entirely new kind of verse and to a new theme, which might justify and render natural a new system of Prosody.

It has been a mooted question whether the dactylic hexameter had been used at all in Latin before the time of Ennius. There exist no literary remains of such verse that can be confidently called genuine. According to Varro, Plautus wrote his own epitaph in hexameters, but it cannot be shown that he did it earlier than the composition of the great epic of Ennius—the Annales. The so-called Marcian Oracles were possibly in hexameters, though the quotations given by Livy do not justify this view. Yet

¹ Horace, Ars Poetica, 250-260.

even if some few stray attempts had been made at imposing this metrical form upon Latin, certainly no extended literary work had ever been written in it; and Ennius, in writing the *Annales*, had the field entirely to himself. As it was distinctly a new field, such changes as he might make in the matter of forms and measures and quantities would arouse less criticism than like changes in a more familiar sphere. The alterations that he effected by his own example may be roughly summarised as follows:—

- (1) A fairly frequent use of a metrical accent as distinguished from the natural, colloquial accent of a word.
- (2) A diminution in the number of varying quantities. Ennius regarded as short nearly all the syllables as to which there had previously been any doubt, as, for instance, musă, patrě. Thus dactyls were made possible and easy.
- (3) By way of compensation he regarded all vowels that stood before two consonants (not a mute and a liquid) as being long by position, after the rule of the Greek.
- (4) The elision of a final vowel, or of a syllable ending in *m* before a vowel. Ennius himself also made little account of a final *s*, in this following the pronunciation prevalent at that period and long after.¹

¹ Birt, Historia Hexametri Latini (Bonn, 1876); Müller, Greek and Latin Versification, Eng. trans. (Boston, 1895); Klotz, Grundzüge der altrömischen Metrik (Leipzig, 1890); Plessis, Métrique Grecque et Latine (Paris, 1889); Westphal, Allgemeine Metrik (Berlin, 1892); and the treatise by Gleditsch in Iwan Müller's Handbuch, ii. Compare also Havet, De Saturnio Latinorum Versu (Paris, 1880); Thurneysen, Der Saturnier (Halle, 1885); and du Bois, Stress Accent in Latin Poetry, pp. 24-74 (New York, 1906).

These changes seem comparatively simple, yet they were sufficient to alter radically the whole structure of Latin verse. The number of doubtful vowels which were now converted into short ones gave to the language of poetry that ease and lightness which are to be found in later dramatic compositions. Whatever was done by succeeding writers in giving mobility to the language, was done wholly because of the example which Ennius first set in relieving the heaviness of verbal structure. After he had made all his changes, there were still left many long syllables which Lucretius, and Vergil after him, found it expedient to shorten. But it is because of Ennius that the language of Latin poetry has definiteness and form, that it became better fitted for the use of those who were further to polish and enrich it; while, on the purely literary side, he set a very high standard below which no writer could fall and hope to receive an equal share of honour.

Ennius, as already said, was a great innovator in form and style. He was not a creator of language, in spite of the praise given him by Horace. There remain to us about twelve hundred fragments of the different writings of Ennius; but in all of them there are to be found only twenty-two words that are peculiar to him, while in 430 lines of a writer like Pacuvius, who prided himself upon his conservatism, there are thirty-three $\delta \pi a \xi \epsilon i \rho \eta \mu \epsilon \nu a$. From this comparison one can see how little Ennius prob-

¹ Horace, Ars Poetica, 54-56.

ably added to the vocabulary of the language. The verbal enrichment which it needed came from another source, and one which would at first sight have seemed a most unlikely one.

It is in Titus Maccius Plautus that one finds, after surveying all literature, ancient and modern, the closest parallel to Shakespeare, - modified, of course, by many essential differences, but on the whole true enough to be very striking. Like Shakespeare, Plautus was of humble origin and the native of a country town. Like Shakespeare's, his education seems to have been chiefly of that sort which comes from association with men rather than with books. Like Shakespeare, he was at first a subordinate, attached to a theatre; then a hack writer who modernised old plays; and finally, a dramatist who apparently wrote with little care for fame, but with the thought of his audience always before his mind. The age in which Plautus wrote resembles in many ways the age of Elizabeth and James. There was in the air the stirring of an adventurous spirit. The nation was awakening to a sense of its own power, and entering upon an era of conquest and supremacy. Rome was touched by something of the mercurial temper of Greece, just as the England of Shakespeare displayed much of the gayety and recklessness of France. Rome, too, was facing the Carthaginians in battle, just as England was confronting the armies and fleets of Spain. The victory of Duilius off Mylæ, and the

defeat of the Armada by Drake, the conquest of Sicily, and the colonisation of the New World, — these, each in its own time and in its own way, stirred Rome and England to their depths. There was an intellectual and political quickening which stimulated both the Roman and the English people to look with favour upon whatever was new, original, and strong.

If the people for whom Plautus and Shakespeare wrote were much alike; if the ages in which they lived were not dissimilar, so the cast of mind and the richness of intellectual endowment of these two great masters of language have a kinship of their own. The differences, of course, are all immensely in Shakespeare's favour. In Plautus there is nothing of the spirit of pure poetry which breathes through almost everything that Shakespeare wrote. His tone is many degrees lower. The fact that he wrote comedy alone, while Shakespeare composed immortal tragedies as well; the occurrence of the same types - the foolish old man, the austere old man; the swindling slave, the faithful slave; the loose young man, and the precise young man; the lying, foul-mouthed courtesan, and the inexperienced, affectionate meretrix; the parasite, and the bullying soldier, — all this repetition, despite the writer's extraordinary inventiveness and vigour, becomes monotonous and perhaps makes us feel that we

¹ See, in general, Ribbeck's comments in the first volume of his Römische Dichtung, i (Leipzig, 1897–1900).

have been tarrying too long among the slums of the ancient world. Very much, however, of this absence of what is elevating and refined, much of its coarseness and vulgarity, were imposed on Plautus by the conditions under which he wrote. Forbidden to touch upon Roman topics, and warned by the fate of Nævius, with an audience that did not yet contain the well-bred portion of the community, and being thus practically forced to model his plays upon the New Comedy of the Greeks, one must not criticise him too severely. Plautus was working in a harness which sorely hampered him. Then, too, his own sensibilities were not nice. He had been himself a slave and he had consorted with other slaves; and never, like Ennius and Terence and Shakespeare, was he a protégé of the great. He saw only one side of life, and that the side which verges on the gutter. And it was this side that his audiences most of all delighted to see reproduced upon the stage. Hence we must compare Plautus not with Shakespeare as a whole, but with those portions of Shakespeare where the themes and the motives of the two dramatists are similar. Judged in this way, it cannot be said that Plautus is inferior. His buffoons, his hypocrites and sharpers and slaves and courtesans are as richly humorous and doubtless quite as true to life in their way as those whom Shakespeare drew. Pyrgopolinices is merely Sir John Falstaff turned into Latin. onides in the Trinummus is the twin brother of Polonius.

while the Dromios of Shakespeare are actually taken from the *Menæchmi* of Plautus.

But it is not from the literary, but from the linguistic. standpoint that we have now to look at Plautus; and it is in his language, if anywhere, that Shakespeare finds his rival. After studying Plautus carefully, we are conscious more and more of the enormous debt which the Latin language owes him. He alone, by his individual and unaided genius, transformed it from an awkward, cramped, ungraceful dialect into an instrument of speech fit for expressing a wide range of human thought with ease and clearness and precision. Plautus was a great languagemaker, and not merely an improver. His fancy not merely caught at an idea, but flung it out at once into an appropriate verbal form. If he had not the word he wished, then he made the word; and when he had made it, it was, in ninety-nine cases out of a hundred, the very word which the language lacked, so that it fixed itself firmly in the vocabulary of the people, and remained there because it was an actual necessity. Plautus as a word-maker seems inexhaustible. His fertility is as boundless as his wit. No Latin writer except Apuleius, three centuries afterward, ever coined so many words. The comparison of Plautus with Apuleius shows exactly where the greatness of the former lies. Apuleius coins words from mere eccentricity or because he will not take the trouble to find the fitting ones. Plautus strikes out a new phrase, a

striking combination, a picturesque epithet, because the existing vocabulary is too poor to furnish an equivalent. To sum it up in a sentence, the invention of Plautus proves the poverty of the language; the invention of Apuleius proves the poverty of the writer.

Plautus is the one who, in this period of transition, doubled the capacity of the Latin language. The words that he invented were made by him instinctively, according to the various formulæ which Horace afterward described with so much insight. The additions which he made to the Latin vocabulary fall under various heads:—

- (1) Words borrowed directly from the Greek: e.g. dica (δίκη), dapsilis (δαψιλής); dulice (δουλικῶς); euscheme (εὐσχημῶς); logos (λόγος); sycophantio (συκοφαντέω); tarpessita (τραπεζίτης); etc.
- (2) Comic words, chiefly patronymics and long compounds: e.g. Virginesvendonides, the son of a pander, and, comically again, pernonides, "a flitch of bacon" described majestically as the son of a ham. So, again, scutalosagittipelliger. There is very little doubt that Plautus here in a semi-comic way tried to do what the learned Pacuvius seriously attempted, that is, the formation in Latin of compound words, but Plautus failed as did Pacuvius.
- (3) New words formed after the analogy of other words near which they stand in the text, or which suggest them:

¹ Horace, Ars Poetica, 46-72.

- e.g. perenticida suggested by paranticida; sicelicisso suggested by atticisso; and recharmido and decharmido suggested by charmido (from Charmides).
- (4) Compound words freely made and generally thereafter adopted into the language: e.g. opiparus, parcipromus, pauciloquia, salipotens, stultiloquentia; and even better, opimitas, mendicitas, minatio, moderatrix, oratrix, perdisco, perlibet, etc. Words of this class are either based upon existing words and modified to give a different shade of meaning, or they are invented of necessity: e.g. osor, perplexibalis, pollentia, trahax, etc., or else they are verbs boldly formed out of existing nouns and adjectives: e.g. paro, parasitor, pergracor, scortor, sororio, etc.

It will be seen that Plautus enriched the language with words for common use. His word-formations were brought about with that unerring judgment which makes the new word, from the very moment when it is uttered, seem Latin and utterly indigenous. If it be a Greek word, it is so modified as to take on a Latin form. If it be a new word, it is formed upon the analogy of words already existing. If it be an old word used in a new sense, this new sense is given it where the context makes the new sense absolutely plain. Plautus is the first of language-makers. Those who followed him employed his methods though they wrote for the learned. Thus T. Lucretius Carus, in the first century B.C., gives to Roman literature a philosophical terminology so far as he

needed it in setting forth the teachings of materialism.¹ Cicero still later enlarged the philosophical vocabulary by coining words to express thoughts for which the Latin language then had no equivalent.² When Christianity began to spread over the Empire, African writers such as Tertullian and Augustine and St. Jerome introduced a theological vocabulary; but they all fashioned their words on the principles which Plautus in the early days of Roman culture had grasped by instinct.³ Apuleius, with his fantastic combinations, is the Carlyle of Latin literature, while Plautus, as was said before, is the Roman Shakespeare.

Thus the Latin language and the Latin literature developed side by side, in a growth that was steady and continuous. The drama was enriched by Marcus Pacuvius, who represents a succession of the work of Ennius. His doctrina, for which he was so famous in antiquity, is seen in his attempt to make long compounds, in his syntactical carefulness, and in his introduction of philosophical

¹ See such words as corpus in the sense of "matter"; cætus, and glomeramen, "a mass"; corpusculum, or principium, or primordium, each meaning "an atom"; sensus = αἴσθησις; rerum summa, "the universe." See Polle, De Artis Vocabulis Quibusdam Lucretianis (Dresden, 1866); Merrill's Introduction to his Lucretius, pp. 42–47 (New York, 1907); and Reiley, The Philosophical Terminology of Lucretius and Cicero (New York, 1909).

² Note such words as ratio ($\lambda b \gamma o s$), qualitas ($\pi o \iota b \tau \eta s$), species ($\epsilon l \delta o s$). See Reiley, op. cit.

³ See Schmidt, De Latinitate Tertulliani (Erlangen, 1870); Condamin, De Tertulliano . . . Christianæ Linguæ Artifice (Lyons, 1877); and Cooper, Word Formation in the Roman Sermo Plebeius (New York, 1895).

speculation after the manner of Euripides. Then there follow Lucius Attius, with a much more original mind, and probably the greatest of all Roman writers of tragedy; and the young African, Publius Terentius (185-159 B.C.), who composed comedies which in their own manner are most admirable. He gives us, in fact, the urbane and polished comedy of the drawing-room, all with singular refinement and a remarkable appreciation of character. Later, the legitimate drama declined, and mimes took the place of tragedy and comedy. Yet even in these mimes - as, for instance, those of Publilius Syrus and Decimus Laberius, there is the true Roman sententiousness, shrewd practical wisdom, and abundant humour.¹ Attempts were made in the Augustan Age to revive the drama in its earlier form, but of these attempts we have no remains, as we have of the tragedies of the younger Seneca written in the time of Nero and influencing the dramatists of France and England in recent centuries. Ennius had invented a form of satire as a sort of literary miscellany. It was taken up with much force and fire by Gaius Lucilius, from whom O. Horatius Flaccus developed a genial form of poetical composition in hexameter verse, in which he pointed out good-humouredly the follies of his contemporaries. After him, Aulus Persius Flaccus, a rather prim and bookish youth, imitated Horace without his first-hand knowledge

¹ Otto, Sprichwörter der Römer (Leipzig, 1890); and Sutphen, Latin Proverbs (Baltimore, 1902).

of life; while later still, **Decimus Iunius Iuvenalis** converted satire into a whip of scorpions, and lashed the hideous vices that he saw about him, infusing into his lines a certain grim irreverence which has led him to be styled the first exponent of American humour.

The Greek influence was responsible for what we have of philosophical writing among the Romans. In 155 B.C., Carneades, a vehement and rapid speaker, representing the New Academy, with its essential scepticism, came upon a diplomatic mission to Rome from Athens. While there, he publicly discoursed with eloquence and subtlety on the advantages of justice. The next day, with equal eloquence, he refuted all his arguments of the day before. This was, in fact, a practical demonstration of his belief that human knowledge is uncertain and that we have no absolute standard of truth. His orations won him much applause, but he was sent back to Athens without loss of time, as being one whose tenets were essentially immoral. Nevertheless, from this time, philosophy especially that of the ethical schools — found disciples and expounders among the Romans. 1 Roman philosophers gave to the world nothing that is new; yet we owe to such writers as Lucretius the Epicurean, to Cicero the Aca-

¹ See Usener, Epicurea (Leipzig, 1887); Martha, Le Poème de Lucrèce, 4th ed. (Paris, 1885); Thiaucourt, Les Traités Philosophiques de Cicéron et Leurs Sources Grecques (Paris, 1885); Zeller, History of Eclecticism, Eng. trans. (London, 1893); Lecky, History of European Morals, i (New York, 1884); and Binde, Seneca (Glogau, 1883).

demic, and to Seneca the pseudo-Stoic, a body of literature which is both interesting in itself, and valuable as supplying a knowledge of those Greek treatises which have been lost. Lucretius, in particular (96–55 B.C.), is perhaps the greatest of all the Roman poets in originality, in power, and in the peculiar appeal which he makes to the inherent materialism of millions, even at the present day. His technique in his use of the hexameter is still imperfect; but the genius of the writer and his passionate spiritual melancholy overcome defects of style and make him in some respects a model even for Vergil and the cloyingly exquisite Ovid.

Epic poetry was continued from the rough Saturnian in which Nævius wrote his *Punica* until it culminates in the splendid national poem of the Æneid — a marvellous mosaic of all that was finest in both Greek and Roman literature, woven together by P. Vergilius Maro with consummate skill. Later, the Spaniard, Lucanus, composed in the *Pharsalia* an epic of almost contemporary events, following the model of Nævius and Ennius, but succeeded only in writing brilliant lines which have added largely to the world's collection of epigrams. The epic on a Grecian theme, and known as the *Thebais*, by Statius, marks the end of serious epic poetry among the Romans.¹

Lyric poetry in native rhythms, as already said, ante-

¹ See Gubernatis, Storia della Poesia Epica (Milan, 1883).

dates Hellenic influence, though of course this early poetry was informal. But we have already noted that Livius Andronicus composed a set lyric in honour of Juno at the request of the State. However, this attempt was unfruitful, since the Latin language was not yet adapted for lyric composition that could vie with that of the Greeks. It was not until the time of Quintus Valerius Catullus that we find lyric poetry in Latin; for Catullus, an Italian to the core, poured forth in sapphics and easy metres the wild longing of a heart surcharged with intense emotion. In many respects Catullus was an Alexandrian by training; but in the lyrics addressed to Lesbia, his tortured mingling of love and hate are so free from the pedantry of Alexandrianism as to make him seem the predecessor of Gabriele d'Annunzio. With no such passion, yet with infinite grace, dignity, humour, wit, or melancholy, according to his subject, Horace followed Catullus, and to-day must be styled the greatest master of lyric verse among the Latins; for he managed with perfect ease the more difficult measures of the Grecian lyrists, and remained less Alexandrian and more truly Roman than any of his contemporaries. Elegiac verse in Rome was especially represented by Ovid, and Propertius, and Tibullus, - contemporaries, or nearly so, of Horace.1

¹ See Ribbeck, op. cit. i; Werner, Lyrik und Lyriker (Leipzig, 1890); and Sellar, The Roman Poets of the Augustan Age (Oxford, 1892). Cf. also du Méril, Poésies Populaires Latines (Paris, 1843); and Weissenfels, Horaz (Berlin, 1899).

Roman prose begins practically with Cato the Censor (234-149 B.C.) - soldier, statesman, orator, farmer, and also writer; for he produced works on military science, on agriculture, and what would to-day be of vast interest to us, a treatise entitled Origines, in which he discussed the history, antiquities, and language of the Roman people. Some slighter treatises of his relate respectively to medicine, to epistolary composition, and to anecdotes. Practically all that we have left is the little monograph, De Re Rustica, a practical handbook on the management of a farm. Other Romans at a comparatively early period wrote the annals of their own country, but they employed the Greek language until the time of Cato. This form of narrative, with its patriotic background, was very attractive to the Romans; so that, after Cato and his contemporaries, we find History written by Varro, Atticus, Hortensius, and Cicero himself, whose two famous contemporaries, Julius Cæsar and G. Sallustius, reached a very high degree of eminence. Sallust, indeed, may be thought to challenge Thucvdides, whom he imitated, just as Titius Livius, in the Augustan Age, wrote almost as delightfully as had Herodotus. After him Tacitus, in his two remarkable works, the Annales and the Historiæ, brought historical writing to a climax of excellence; for after him we find only biographies like that of Suetonius on

¹The fragments are collected in a commentary by Bormann (Brandenburg, 1858).

the Twelve Cæsars or else epitomes and fragmentary sketches.

In their prose-writing the Romans developed, first among western peoples, prose fiction in the form of the novel and romance, in which they were imitated by the later Greeks. But while the Greeks in fiction were almost always prolix and unreal, the Romans, as might have been expected from their love of the concrete, struck out at a single blow, as it were, the realistic novel in the socalled Satira of Gaius Petronius (d. 66 A.D.), which is wonderfully modern in its treatment of character as well as in its sound criticism of life and learning. Only a portion of it remains, yet it is one of the choicest fragments of ancient literature as well as a clew to much that would otherwise be obscure in the life and language of the common people. Lucius Apuleius (second century A.D.), of Medaura in Africa, represents better the earlier form of fiction in which short stories (generically known as Milesians), are strung together by a thread of plot, but are

¹ The fragments of the Roman historians are collected by Peter, Historicorum Romanorum Fragmenta (Leipzig, 1883). See Ulrici, treatise on the general characteristics of ancient history (Berlin, 1833); Gerlach, Die Geschichtschreiber der Römer (Stuttgart, 1855); and the introduction to Mommsen's history of Rome. On biography, see West, Roman Autobiography (New York, 1901); Wiese, De Vitis Scriptorum Romanorum (Berlin, 1840); and Suringar, De Romanorum Autobiographis (Leyden, 1846). Much biographical material is found in the form of letters—especially those of Cicero, Pliny, Seneca, Symmachus, St. Jerome, St. Augustine, and Cassiodorus. See Roberts, History of Letter-Writing (London, 1843).

not as yet woven into anything like a definite unity of form. It is odd that these two writers are practically the only ones who in Roman literature have left behind them anything like completed works. The Greeks of the same period as Apuleius, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of romances, and later, poured forth a vast number of which have been preserved. The best of them is the Æthiopica by Heliodorus, composed in the fourth century, and the curiously symbolistic novel, Daphnis and Chloë. The author of the latter is unknown, but the book has exercised a strong influence upon modern prose fiction from St. Pierre to Émile Zola. A collection of imaginary letters written by Alciphron, a Greek sophist of the second century A.D., give us very piquant pictures of Bohemian life in Athens.

In addition to these various forms of pure literature, there were written Epigrams of which the master in Latin is Martial, though the Romans seem to have relished no less the pointed lines of Plautus and Horace and Lucan in poetry, and the sententious aphorisms of Seneca and Tacitus in prose.² These accorded well with the spirit of

¹ See Chassang, Histoire du Roman (Paris, 1862); Dunlop, A History of Fiction, last ed. (London, 1896); Salverte, Le Roman dans la Grèce Ancienne (Paris, 1894); Warren, A History of the Novel (New York, 1895); Collignon, Etude sur Pétrone (Paris, 1892); the Introduction by Hildebrand to his edition of Apuleius (Leipzig, 1842); and the Introduction to Peck's translation of the Cena Trimalchionis, 2d ed. (New York, 1908).

² See Booth, *Epigrams Ancient and Modern*, 3d ed. (London, 1874); and for the rough and rather coarse epigrams directed against the emperors, see Bernstein, *Versus Ludicri in Casares Priores* (Halle, 1810).

homely wisdom that was to the Romans what speculative philosophy was to the Greeks. So comedy of the farcical type and the cynical shrewdness of the mimes were prefered to tragedy at almost every period of Roman culture. The truth is that only on the surface were the Romans ever Hellenised either in language or in literature. In language, highly educated men wrote in the so-called sermo urbanus, corresponding to the estilo culto of the Castilians. In the easy converse of daily life, among their friends and intimates, they used a much looser and less formal sort of Latin — the sermo cotidianus of Cicero's letters, for example. The man in the street spoke the sermo plebeius, which was nothing more than the older Latin which had at one time been current everywhere, but which now was held by the literati to be the shibboleth of ignorance.1 As to literature, ornate orations, exquisitely wrought lyrics, learned epics, and carefully penned histories have come down to us bearing the impress of Grecian models; but we know that for the people at large there existed an immense mass of popular compositions, sometimes transmitted orally and sometimes not nursery songs, lines sung by children at play, the triumphal chants of the common soldiery, as well as fables, familiar letters, riddles, and acrostics. Against Terence we must set Plautus; against the epic of Vergil we must

¹ See Cooper, op. cit., Introduction; Olcott, Studies in the Word Formation of the Latin Inscriptions (Rome, 1898); Grandgent, Vulgar Latin (Boston, 1908); and du Méril, op. cit.

set the satires of Horace and Persius; against the stately prose of Cicero we must set the slangy and ungrammatical and yet vivid jargon which flew back and forth between Trimalchio's guests.¹

Again, Roman taste is seen in the choice of those literary forms which were regarded as most admirable. The Greeks might hold tragedy to be the noblest form of composition, but the Romans gave the first place to oratory and history, while they enjoyed the epic only because (as in the case of the *Æneid*) it ministered to their pride of nationality. If we look at their philological studies, we shall see that they gave the preference to such as were of a practical character. As early as 150 B.C. there came to Rome Crates, the grammarian from Pergamum,2 and, as said, during his stay he excited much interest in theoretical grammar and linguistic studies generally. Even earlier than this time essays had been written on the ancient literature, partly to explain its meaning and partly its allusions.3 After Crates there was much attention paid to etymology, and in fact, two schools arose, one deriving Latin words from Greek, which was the practice of Hypsi-

¹ See Petronius, chs. 27–78, translated as *Trimachio's Dinner* by Peck, 2d ed. (New York, 1908).

² Supra, p. 120.

³ Lucius Attius wrote a history of Greek and Roman poetry (*Didascalica*), and made some reforms in Roman orthography, abandoning the use of the letters z and y, and denoting the quantity of a, e, and u by doubling them when they were long, thereby imitating the usage in other Italic dialects. See Boissier, *Le Poète Attius* (Paris, 1857).

crates (c. 100 B.C.), and the other explaining everything on the basis of Latin itself. The great name in the latter school is that of M. Terentius Varro (116-28 B.C.), a man of prodigious erudition, which caused him to be styled "the most learned of the Romans." Varro was one of the great scholars of all time, to be compared with Eratosthenes and Aristarchus among the Greeks, with Scaliger and Lipsius just after the Renaissance, and with Mommsen in very recent years. Before giving any account, however, of his philological labours, an incident should be mentioned, the influence of which has continued to the present day. In the year 80 B.C. there came to Rome a roving scholar, a native probably of Alexandria. He had been trained both in his native city and at Pergamum. He had listened to the disputes of the linguists of each school, and was well versed in all their doctrines. This person, Dionysius Thrax, is an admirable type of the middleman who stands between the creative mind and the mind that is entirely receptive. Until his day, grammar, as we have already seen, was not so much an art in itself as an adjunct to logic and philosophy. Dionysius Thrax made digests of the lectures which he had attended, putting down the results in a didactic manner. was precisely what most appealed to the Roman mind something definite, concrete, and dogmatic. One treatise of Dionysius, his Τέχη Γραμματική, set forth certain principles which made it the first treatise on Formal Grammar.

Translated into Latin, it became a standard text-book, and from it there have come to us the technical terms of formal grammar employed in modern languages.¹

A Roman contemporary of this Greek grammarian was L. Ælius Præconinus Stilo, of whom we have notices in many of the later writers, although even fragments of his writings do not remain. He was the first Roman to deserve the name of philologist. He was of knightly rank, an aristocrat by birth and training, and had a gift of natural oratory; though he sought no political office, and merely wrote orations for his friends, after the fashion of the Greek orators. He was a type of the patrician scholar, and had the true patrician's taste for antiquarian knowledge. Therefore he came to be a profoundly learned authority upon everything relating to ancient Latin, both in the matter of antiquities and in the usages of the earlier language. Cicero styles him "most learned in Grecian

¹ In the fourth century the book was translated into Armenian, while the original was somewhat curtailed. The Armenian version has given us back five more chapters than any of the later Greek manuscripts contain. See the edition by Uhlig (Leipzig, 1883); and the French translation by Cierbied, Mémoires et Dissertations (Paris, 1824). Cf. also Gräfenhan, op. cit. i. p. 402 foll., and the account in Steinthal, op. cit. A list of these grammatical terms in Greek, with their Latin equivalents, may be found in Gudeman, Outlines of the History of Classical Philology, 3d ed. pp. 30–32. Thus, we have δνομα = nomen, "noun"; $\pi \tau \omega \sigma \iota s = cas \iota \iota s$ "case"; $\chi \rho \delta v \sigma s = temp \iota \iota s$, "tense"; $\sigma \iota \iota v \iota \iota \iota s = temp \iota \iota s$, "tense"; $\sigma \iota \iota v \iota \iota s = temp \iota \iota s$, "conjugation"; genus, "gender"; $\xi \gamma \kappa \lambda \iota \sigma \iota s = nod \iota \iota s$, "mood"; $\pi \rho \sigma \sigma \omega \pi \sigma \iota s = persona$, "person"; $\delta \rho \iota \theta \iota s = numer \iota \iota s$, "number." As the ablative case does not appear in Greek, it was first called "the Latin case" (cas \iota s Latinus), and by Ouintilian, ablativus.

literature as well as in Latin," while his pupil, Varro, speaks of him as litteris ornatissimus memoria nostra. He was undoubtedly the first of the Romans who had any claim to be regarded as a classical philologist. It was very likely he who took up the teachings of Dionysius Thrax and applied them to Latin, thus becoming the First of the Roman Grammarians. Likewise, he wrote commentaries on such ancient works as the Carmina Saliorum and on the Twelve Tables. Gudeman believes that he even prepared an edition of Plautus with critical signs; yet of this last there is no direct evidence.

His greatest fame comes from the fact that he was a teacher of Marcus Terentius Varro, the most learned, the most indefatigable, and the most prolific of any Roman scholar who ever lived. In a later century St. Augustine says of him: "Varro had read so much that we ought to feel surprised that he found time to write anything; and he wrote so much that we can hardly believe that any one could find time to read all that he composed." In fact, he wrote at least six hundred.

Varro was, however, no mere recluse. He commanded a squadron in the war against Mithradates; he served as a general of Pompey in Spain, and though he was compelled to surrender his troops to Cæsar, he escaped himself and remained steadfast to the aristocratic cause until

¹ So Auson. *Prof. Burd*, xx. 20. Cf. Boissier, *Etudes sur M. T. Varron* (Paris, 1861).

the final battle at Pharsalus. Since resistance to the dictator was then useless, Varro returned to Rome, expecting perhaps to be put to death. But the high-minded Cæsar, who was himself a scholar, and wished to promote scholarship, received Varro most graciously, and gave him the agreeable task of founding a great public library in Rome.¹ This was the more pleasing, since Varro's own splendid private library had been destroyed in the Civil Wars, just as his beautiful villa at Casinum had been plundered and defiled by Antony, — a scene which Cicero has depicted with almost hideous realism in his second Philippic oration.

Out of Varro's encyclopædic works, not many remain, partly because they were too numerous, and partly because it was the habit of Roman scholars to condense and abridge long works, taking from them whatever seemed most interesting. It is for this reason that we have the most valuable part of Livy only in the form of an epitome; that the greater portion of Petronius has been lost, and that of Varro's six hundred or more works there remain to us only his treatise on husbandry (De Re Rustica),

¹ Suetonius, Julius, 44. Varro never completed the task which had been assigned him. The first public library was opened by the private munificence of Asinius Pollio (34 B.C.). At last, five imperial libraries, of which two are the most celebrated, — first that founded by Tiberius and famous for its complete collection of State papers and public documents, and the Bibliotheca Traiana, the most magnificent of all, since most of the books in it were written or inscribed upon thin leaves of ivory. See Lanciani, Ancient Rome in the Light of Recent Excavations, pp. 178-205 (Boston, 1889).

a number of quotations and references scattered throughout the pages of Latin literature, and finally, a very much corrupted collection of six books taken from his great treatise on the Latin language (De Lingua Latina) — about one-quarter of the whole.¹ The book which gave him his highest reputation among the ancients, who considered it his masterpiece, has practically perished and, in truth, it probably did not survive the end of the sixth century A.D. This was his Antiquitatum Libri, divided into forty-one books, and crowded with the vast knowledge which its author had acquired by years and years of patient reading and research. To be noted also are his Sententiæ, a collection of pithy sayings, much quoted in the Middle Ages, and his Saturæ written in a mixture of prose and verse (Menippeæ).

It is the treatise on the Latin language (one part of which was dedicated to Cicero) that is most interesting, both because of the subject itself and because we still possess a portion of the book. The treatise seems to have been arranged in three great divisions. The first seven books dealt with the origin of words and phrases, and was, in fact, a history of the Latin language largely from the point of view of etymologists.² The next six books were grammatical,³ relating chiefly to the forms and

¹Edited by A. Spengel (Berlin, 1885).

² Supra, p. 146 foll.

³ In these books Varro examines the natural and arbitrary divisions in nouns and verbs. Words are "naturally" divided according to analogy, and "arbitrarily" divided according to anomaly.

inflection of nouns and verbs, since Varro regarded these as the only two real parts of speech—in this respect resembling the Semitic grammarians. The last eleven books have to do with the laws of syntax (ut verba inter se coniungantur). The six books which we still possess are, as is seen above, partly etymological and partly relating to inflections. They give us incidentally a great deal of information about curious points of ancient usage at Rome, and Varro shows wisdom in not attempting to derive the vocabulary of his language from the Greek. On the other hand, he etymologises entirely by ear, so that many of his derivations are as absurd as those which were prevalent in the Middle Ages.¹

This monumental work, even in the scanty fragments which remain to us, has always been studied with great profit, especially the purely lexical portion (v-vii). Its arrangement is not alphabetical, but the words that Varro treats in it are taken up by groups based upon their association with one another. Thus the author begins the fifth book (after a short introduction) with names relating to places, discussing first the word *locus* and its derivatives *locare*, *locarium*, and so forth, following this by a division of places in heaven and places on earth. Turning to the former, he regards *caelum* as the antith-

¹ Thus Varro says that canis is derived from cano because dogs give signals (canere) at night; that stags are called cervi from gero (quasi cero), because they carry huge antlers; and that dives is from divus, because a rich man is like a god in wanting nothing.

esis to terra and its partial synonym humus, which suggests humor, humidus, udus, sudor, and other words relating to moisture, as puteus (a well), lacus, palus, stagnum, fluvius, flumen, stillicidium, amnis. The sound of amnis suggests to him the place-names, Interamna, Antemnæ, and Anio. Because the Anio empties into the Tiber, he discusses the etymology of Tiberis. And so one word suggests another, and he takes each of them and defines it, giving the etymology and citing from both poets and prose-writers in illustration of the various uses of the word or name in question. In this way we receive the impression of a familiar, off-hand lecture, and such seems to have been his intention; though K. O. Müller has set forth an hypothesis that in the De Lingua Latina we have only the rough unfinished notes of a book rather than the book itself in its completed form.1

Whatever one may say of Varro's rather childish etymologies, he does give the explanation which the Romans themselves were wont to hold as to the origin of certain words. But his citations from authors now lost, and the occasionally full explanations which he gives of matters of usage and law, are a source of information to which scholars will always resort. On such matters, Varro's position as the most learned of the Romans gives his utterances the weight of unimpeachable authority.

¹ It may be that Varro published an epitome of the work in nine books. See Roth, Leben Varros (Basle, 1857).

Especially important was his labour as a critic of texts, since it resulted in the establishment of a Plautine Canon. It is the one instance of such a canon created among the Romans and lasting to the present time. In his treatise on the comedies of Plautus, he appears to have discussed with much acumen the question as to which comedies bearing the name of Plautus were genuine and which were spurious. As is well known, the number of such plays had become very great, owing to the fact that the name Plautina was used as a generic term for a certain type of fabula palliata; 1 and because the plays of Plautus had become confused with those of another writer, Plautius. Hence Gellius says that, in all, 130 comedies were generally styled "Plautine." To the separation of the true from the false among these, Varro set himself to work, using both the traditional information that had descended to his time, and also the texts which he compared, collated, and criticised with great acuteness. The number of genuine plays he set at twenty-one. The general acceptance of his dictum is seen in the fact that of the whole list of 130, only the twenty-one fabulae Varronianae have survived to modern times, one of them, the Vidularia, having been practically lost during the Middle Ages.2

Glossography flourished in Rome, though it was

¹ Gellius, iii. 3.

² See Ritschl, Opuscula, ii. (1868); Neue Plautinische Excurse (Leipzig, 1869); and on the lost Vidularia, Leo, De Vidularia Plauti (Göttingen, 1805).

almost wholly of a lexical and grammatical character. During the Ciceronian, Augustan, and Silver Ages it served to explain and illustrate the meaning of archaic Latin and also the plebeian form of speech. The distinguished glossographers Præconinus Stilo and Aurelius Opilius created a scientific basis for the study of the Latin language by going back to the oldest records and studying them. The results of their work and that of their contemporaries have in many cases come down to us in special glossaria (e.g. to Plautus, Terence, Vergil, Sidonius, and others), from seven of which Cardinal Mai, in the nineteenth century, compiled his great Glossarium Vetus.¹ Roman grammarians and critics early began to edit Latin texts. M. Antonius Gnipho (c. 114 B.C.) published commentaries on the Annales of Ennius. Cicero (or his brother Quintus) published an edition of Lucretius.2

It is unfortunate that no exact details concerning the Roman criticism of texts have come down to us. Most Roman scholars appear to have confined themselves to the writing of marginal glosses. They distinguish the various processes: *emendatio*, *distinctio*, and *adnotatio*, which last word means the adding of notes, these notes being sometimes brief *signa*, and sometimes brief com-

¹See Löwe, Prodromus Corporus Glossariorum Latinorum (Leiprig, 1876).

² See Munro, Lucretius, Intr. ii. pp. 2 foll.

mentaries in the modern sense of the word. Suetonius wrote a treatise on these notes, part of which has come down to us written in Greek. He mentions twenty-one critical signs, chiefly variations and combinations of the obelus, asterisk, diplê, antisigma, and point (punctum); vet they appear to have been used less for textual than for æsthetic and literary criticism (κρίσις or distinctio), for which there were also other symbols that Suetonius merely mentions without describing.1 To the Latin critics is due the so-called subscriptio, of which one hears a good deal in the study of manuscripts. A subscriptio is a note added to a manuscript. It usually begins with the word legi (also recognovi, contuli), followed by the name of the reviser, with the date, place, time, circumstances, or other details regarding the revision. This revision indicated by the subscriptio is usually not a critical recension of the text, but only a sort of proof-reading, i.e. a guarantee of the correctness of the copy from an original.2

It is to be noted that the Romans paid considerable attention to Epigraphy. Inscribed stones on which the

¹E.g. notae simplices. One of these is of some importance as being a distinct addition. It is the sign ¹H, called alogus, and marks an anacoluthon, or a difficult expression, such as the aequore insso Aen. x. 444, so marked by Probus.

²Subscriptiones are found in manuscripts of all the best Latin writers, including Cæsar, Cicero, Vergil, Horace, Livy, Persius, Martial, Quintilian, Juvenal, and Mela. See Haase, De Lat. Cod. MSS. Subscriptionibus (Breslau, 1860).

Greeks preserved their public documents were stored in the temples of every Hellenic city, and records were hewn upon the walls and pediments and altars, so that, as Hübner says, "the history of a Greek city was literally written upon her stones." These inscriptions were frequently cited as documents by the Greek orators and afterward by the historians, but it was not until the Alexandrian Age that regular collections of them were made by such scholars as Philochorus (300 B.C.) and Polemo (200 B.C.), who was nicknamed στηλοκόπας because the study of inscriptions was a passion with him. At Rome from about 50 B.C. until 200 A.D. they are quoted by the orators and historians, and studied by some of the grammarians, such as Varro, Verrius Flaccus, and Probus of Berytus; while they are collected for legal purposes by the writers on Roman jurisprudence.

Passing over Ateius Prætextatus (c. 29 B.C.), who was called philologus, and Asconius Pedianus (3 A.D.), the well-known commentator on Cicero, and the annalist Fenestella (19 A.D.), we come to the next great name, which is that of Marcus Verrius Flaccus (c. 10 B.C.), tutor to the children of Augustus, and a scholar who deserves especial mention for his rank in both philological study and the general history of education. Verrius Flaccus may fairly be described as the compiler of the first Latin

¹ Infra, p. 169. ² Ibid. ³ Suetonius, Gram. 10.

lexicon ever written, though perhaps it might be more truly called an encyclopædia. Its title was De Verborum Significatu, written in more than twenty-four books. It was a lexicon because it defined and illustrated by citations the words of the Latin language in their alphabetical order. It was an encyclopædia because it gave information on innumerable topics concerning history, antiquities, and grammar, and with exhaustive and elaborate quotations from every class of writers — poets, jurists, and historians, as well as from ancient legal documents, rituals, and sacred formulæ. This great work in its original form is In the second century A.D. it was abridged by a grammarian, Pompeius Festus, in an arbitrary fashion which allowed only one book to each of the letters of the alphabet, and this abridgment by Festus was itself compressed into a still briefer epitome by the monk Paulus or Paul Warnefrid, usually spoken of as Paulus Diaconus. The epitome by Paulus, dedicated to Charlemagne (c. 800 A.D.), is now the principal source of our knowledge of the original treatise; but many fragments of the notes by Festus remain, while Gellius here and there cites extensive passages at first hand from Verrius. These show how the original treatise was mutilated both by Festus and by Paulus.¹ Yet badly as the remains of Verrius were treated, they are perhaps the most valuable source of information remaining for the study at second hand of

¹ All the remains have been edited by Thewrewk de Ponor (Prague, 1891).

archaic Latin and for curious information on the subject of Roman antiquities.¹

Verrius is to be remembered for another thing—his system of education, which for the first time among the Romans appealed to a spirit of emulation and ambition rather than to the dread of punishment. In teaching, Verrius offered prizes for proficiency in study, and laid stress upon the reward of merit rather than upon the chastisement of neglect and ignorance.²

It was at this time, after the beginning of the first century of our era, that the Greek and Roman learning became so blended as to be thereafter, in the sphere of the higher studies, substantially a single field. Henceforth all Romans of cultivation were not only familiar with Greek and with its literature, but the Greek world had become largely Romanised in its institutions and in many of its customs. Greeks flocked to Rome in such great numbers that we find Juvenal, a little later, complaining that the Roman capital had become a Greek city. Both languages were spoken side by side; Romans wrote in Greek or in Latin as they chose; the pages of their most familiar and intimate compositions (the letters of Cicero, for example) were studded with Greek phrases and allusions; while the Greeks, though they never took so kindly to the Roman speech, busied themselves in reading and writing Roman

¹ See the chapter on Verrius Flaccus by Nettleship in his *Essays in Latin Literature*, pp. 201–247 (Oxford, 1885).

² Suetonius, Gram. 17.

history and in the scientific study of Roman institutions. Dionysius of Halicarnassu wrote of the archæology of Rome. Plutarch, that remarkable master of literary portraiture, found parallels in the lives of Greeks and Romans, and in his Αἴτια 'Ρωμαϊκή investigated the meaning of Roman customs. One of the best-known Roman historians and scholars, Gaius Suetonius Tranquillus, composed partly in Greek and partly in Latin his learned summaries of the usages of both peoples.¹ The intellectual unity of Hellas and Rome became clearly visible in the system of education now finally accepted by the Romans, uniting as it did the early theory of the Latin people with that of the more highly intellectual Greeks. As Roman thought and literature in this period grew more and more academic, it is proper here to summarise the principal features of the Græco-Roman Educational System, as giving a general conspectus of the progress of learning in the ancient world.

The Roman training, as a whole, may be described as a Greek structure on a Latin foundation. The elementary part of it is native; the more purely scientific part of it is

¹ Suetonius is best known for his biographies of the Twelve Cæsars; yet he wrote many treatises, chiefly on antiquarian subjects, such as the names of articles of clothing, the origin and early import of imprecations and words of abuse, an account of celebrated courtesans, a manual of court etiquette, and a collection of miscellanies in ten books. The fragments of these lost treatises are edited by Reifferscheid (Leipzig, 1860). It is not known which of them were written in Latin and which in Greek. See the preface to the edition by Roth (Leipzig, 1886).

foreign. This represents, of course, the history of Roman education, in which simpler forms were developed before the Greek influence had been felt at Rome; while the scientific features were introduced after the time of Livius Andronicus and Ennius. In other words (to use modern terms), the common-school system at Rome was Roman; the secondary and higher education were Greek. The very names given at Rome to the three classes of teachers were most significant. The elementary teacher is called by a Latin name (litterator or magister litterarius); while both classes of advanced teachers had titles borrowed from the Greek (grammaticus, rhetor).

In early Rome, education was regarded as important, though it was not obligatory by law, as it was at Athens and in other Greek States. Schools were few. Most fathers taught their own sons at home. This in itself implies that the teaching was very simple and of a utilitarian character. Reading, writing, arithmetic, and the memorising of the Twelve Tables comprised nearly everything that was taught in the elementary schools after these had been established in the fourth or fifth century B.C.¹ Plutarch's statement ² that Spurius Carvilius was the first person to open a school at Rome (231 B.C.) must be understood as referring to the secondary schools alone. In the elementary schools the course, as stated above,

¹Livy, iii. 44; v. 44; vi. 25.

² Quaestiones Romanae, 59.

was one of reading, writing, and arithmetic. Reading was made attractive at first by using ivory letters and other devices. Writing lessons were given on wax tablets ruled with lines. Arithmetic was regarded as extremely important, though it was not pursued much further than addition, subtraction, multiplication, and division. Great stress was laid on mental arithmetic, which consisted of a rigid drill in calculation on the fingers up to sums of four and five places of figures; while complicated problems were solved by means of the abacus or calculating board. Fractions were viewed as very difficult. The Roman system of reckoning was originally duodecimal (by twelves), but later decimal (by tens). Boys of wealthy families, after finishing their elementary studies, were sent to the grammar school, where they received instruction in the first principles of a liberal training (eruditio liberalis).1 The chief object which the grammaticus had in mind was to impart a thorough knowledge of the Greek and Latin poets, this knowledge covering not only purely literary discussions of style and metre, but also the subject-matter, such as historical topics, geography, mythology, and ethics.2 Long passages of favourite authors were learned by heart, and writing verse was also practised. Late in the first century B.C. there were added the subjects of music and geometry.3

¹ Cicero, Tusc. ii. 11, 27.

² Cicero, In Verrem, i. 18, 47; Quintilian, i. 4.

³ Seneca, Epist. 88, 9; Suetonius, Tib. 3.

History and geography were, as time went on, more and more valued as a part of a liberal education. We have seen that even about the beginning of the Alexandrian Period, Descriptive Geography took definite shape and form. It was then that Scylax, a Carian Greek, sailed down the Indus and around through the Indian Ocean and the Red Sea, occupying thirty months for the voyage. His name is attached to a so-called Periplus, which, however, could not possibly have been written by him.1 A little later, Eudoxus of Canidus proved mathematically the spherical shape of the earth, and first divided the globe into five zones. The campaigns of Alexander the Great laid the western and southern parts of Asia open to Greek research. Physical geography was developed by the Ptolemies in their commercial expeditions; and all geographical knowledge, so far as it then existed, was used with scientific skill by the Alexandrians, such as Eratosthenes, Hipparchus of Nicæa, and Posidonius of Apamea (90 B.C.). We have only fragments, however, of most of these geographers. A very great and enduring work is that of Strabo of Amasia (c. 20 A.D.), which combines descriptive geography with ethnology. To what the Greeks had learned he added a knowledge of the Roman conquests. And though his historical work is lost, his treatise on geography (Γηωγραφικά) in seventeen books is the most complete

¹ See the edition by Fabricius (Leipzig, 1883); and Antichan, op. cit.

geographical treatise of antiquity. It is, indeed, very far from a dry and monotonous screed. It was meant to be read, and it is very readable, so that it has been called a sort of political or historical geography. Napoleon caused it to be rendered into French, with notes. 1 During the wars in Gaul and the East, maps (tabulæ) were prepared at Rome and displayed in the porticos, where all could see them and understand the despatches which came from the Roman armies. M. Vipsanius Agrippa, by order of Augustus Cæsar, made a great map, on which were indicated the distances between important places throughout the Roman Empire. This map was the origin of modern maps, and contributed greatly to our knowledge of Topography. It was often copied in whole or in part, and from it were made the so-called Itineraria, or maps intended for particular expeditions. The most interesting of such now in existence is the socalled tabula Peutingeriana, preserved in Vienna. Its date is about 250 A.D., and it consisted of twelve slips of parchment which originally marked out all the world as known to the Romans. At present the pieces which should contain Spain and Britain are lost with the exception of a part of Kent.2

Rivalling Strabo in science but not equalling him

¹5 vols. (Paris, 1805–19). See the Introduction by Tozer to his English edition of selections (Oxford, 1893).

² For a representation of this geographical curiosity, see the *Atlas Antiquus* of Justus Perthes (Gotha, 1893).

in interest or breadth of knowledge, the Alexandrian astronomer, Claudius Ptolemæus, made lists (c. 150 A.D.) of places, with their latitude and longitude, and an atlas — the first known — which shows the Indian Ocean as a closed sea. After this time there is nothing novel in geography and topography except the great work of Pausanias (c. 175 A.D.), who wrote an itinerary (Περιήγησις) of Greece in ten books, which is an invaluable study of Hellenic topography. Pomponius Mela, a native of Spain, composed a clear and concise account of the world as known to the Romans of his time.2 At the end of the Graeco-Roman Period, Stephanus of Byzantium compiled a geographical dictionary, of which the substance is taken from older and better writers; and in the sixth century, one Cosmus described India in a book where occurs for the first time the name of China (Sinarum Regnum).

After completing his studies under the grammaticus, a Roman was held to have received a fairly complete education. But such as were desirous of more special and scientific teaching had their choice between the schools of the rhetors and the universities — at Athens, Rhodes,

¹ Translated with a commentary by Frazer, 6 vols. (Oxford, 1898).

² See Frick, *Pomponius Mela und seine Chorographie* (Leipzig, 1880). The remains of the minor Greek geographers are edited by Müller, 2 vols. (Paris, 1882); those of the Latin geographers by Reise (Frankfort, 1878). For a study of early cartography, see Nordenskjöld, *Periplus* (Stockholm, 1897).

Alexandria, or Pergamum, or Massilia.¹ The schools of the rhetors were more immediately directed to rhetorical teaching so as to fit the student for public life as an orator and statesman. Here was taken up the study of prose, beginning with the simple narratio, passing on to the declamatio or suasoria, and ending with the controversia, which had to do with legal points and complicated questions of practical life. In all this there was nothing to appeal to that numerous class of students who, setting aside any political or legal ambition, desired to cultivate as specialists the field of the natural sciences, of pure mathematics, of medicine, of philosophy, or of linguistics. If these persons remained in Rome, they could carry on their work only by employing at great expense the services of a private instructor in the person of some learned Greek.2 Thus Cicero, when a boy, had in his father's house various Greek tutors, among them the celebrated Archias of Antioch, while only one of his masters (Quintus Ælius) was a Roman born. Later, he studied under

¹ See supra, pp. 88-125.

² See Saalfeld, Der Hellenismus in Latium (Wolfenbüttel, 1883); Eckstein, Lateinischer und Griechischer Unterricht (Leipzig, 1887); Compayré, History of Paedagogy, English translation (Boston, 1886); Clarke, The Education of Children at Rome (New York, 1896); and Munroe, op. cit. Petronius satirises the ineffectiveness of private instruction (1-4) when the teacher was dependent on the good-will of the student, and therefore let him choose advanced studies prematurely. "Now as boys they fool away their time in the schools, as young men they are jeered at in the forum, and what is still more disgraceful, the thing which they have learned wrong they are ashamed to admit when they grow up."

Philo the Academic, while he learned rhetoric from Apollonius Molo of Rhodes and trained himself in close thinking under Diodotus the Stoic. Then he went to Athens, where he attended the lectures of Antiochus and subsequently heard the chief philosophers and rhetoricians of Asia. It was his practice every day to declaim in both Greek and Latin with other young men, so as to acquire fluency and style. At this time he seems to have given serious attention to only one of his own countrymen, the great lawyer, Scævola.

The Roman theory of education was fully set forth in the first century A.D. by M. Fabius Quintilianus (35-c. 97 A.D.), a very cultivated Spaniard who lived and taught at Rome. This was, indeed, the so-called Period of Spanish Latinity, represented not only by Quintilian but by the two Senecas, the epic poet Lucan and the epigrammatist Martial. In this same century, indeed, Rome had its first foreign emperor in the person of Trajan, who was a Spaniard, born near Seville. Quintilian's work in twelve books is entitled *Institutio Oratoria*. It gives his view of the complete training of an orator, beginning with early childhood. He makes it evident that to him, as to the Romans generally, oratory is the supreme art. The orator must be trained in grammatical studies, he must be a master of language and skilled in all the arts

¹ The Elder Seneca was a professional rhetorician, and we have from his pen a number of *suasoriae* and *controversiae*, which are edited by Kiessling (Leipzig, 1872), and H. J. Müller (Prague, 1887).

of persuasion; but he must also be much more than this. He must be deeply versed in the learning of his time, in the history of his own country, in philology, in law, and in science, in order that as an orator he may draw upon an inexhaustible store of illustration, allusion, ornament, and anecdote. Finally, he must be a man of exalted character, for no oratory is truly effective unless it is imbued with moral earnestness and absolute sincerity. "The perfect orator is the perfect man." The first book of Quintilian's treatise is peculiarly interesting because in it, speaking of the early grammatical training of a child, he discusses minutely the alphabet, the parts of speech, word-changes, spelling, punctuation, barbarisms, solecisms, analogy, the influence of custom, and at last etymology. All these things he illustrates by a number of examples and anecdotes, which have been to later generations a treasure-house of curious facts regarding the Latin language. Throughout the book the tone is very modern, and some of his precepts lie at the very foundation of modern teaching. Thus, in speaking of corporal punishment in school, he says very sensibly: -

"That boys should suffer corporal punishment, even though this custom be common, I can scarcely allow; in the first place, because it is disgraceful and a punishment fit only for slaves; and in the second place because, if the disposition of a boy is so base as not to be affected by reproof, he will become hardened, like the worst of slaves, even to lashings; and finally, if a person who regularly has charge of his tasks be with him, there will be no need of any

such punishment. . . . Moreover, after you have cowed a boy with blows, how are you to treat him when he grows to early manhood when no such threat can be employed, and when even more difficult studies must be pursued? Add to these considerations that many things often occur to boys while being whipped which are unpleasant to mention and likely afterward to cause shame under the sway of pain or terror. Such shame enervates and depresses the mind and youths then avoid others, because they have lost their self-respect." ¹

Note also the following brief dictum: -

"Give me a boy who is stimulated by praise and who is down-cast when he fails. His powers must be cultivated under the influence of ambition. Reproach will sting him to the quick. Reward will incite him. In such a boy I shall never fear any indifference; nor will a love of play in boys displease me. It is a sign of vivacity, and I cannot expect that one who is always dull and spiritless will be eager in his studies, when he is indifferent even to that excitement which is natural to his time of life.\(^2\)... Therefore, as early as possible, a child must he taught that he should do nothing in a harum-scarum way, nothing dishonestly, and nothing without self-control. We must always keep in mind the maxim of Vergil: 'So important is habit in the case of the very young.'"²

The Tenth Book sums up Quintilian's general literary criticism of the Roman authors, carefully comparing them with the writers of like *genres* in Greek. This comparison has made the book much read; for the criticism, not being that of a born Roman, is temperate, impartial, and written with a certain mellowness of tone. Its con-

¹ Quintilian, Inst. Orat. i. 3, 14.

² Cf. "All work and no play makes Jack a dull boy."

⁸ Adeo in teneris consuescere multum est.

clusions are essentially those of modern times. Thus he places the Roman epic poets not far behind the epic poets of Greece, the Roman orators such as Cicero practically on a level with the great orators of Athens, and he regards satire as an independent creation of Roman genius.1 His own style is marked by that tempered epigrammatic spirit which was characteristic of the time. Thus he says, "Though ambition is in itself a fault, it is still often the source of achievement." "In almost every undertaking, experience counts for more than theory." "He is equal to any task who believes himself to be equal to it." "Nothing is trifling in our studies." "The pen is often most useful when it erases." "We do not come to write well by writing quickly, but we come to write quickly by writing well." "An evil speaker differs from an evil doer only in opportunity." "It is a full heart and mental power that make men eloquent."

A more famous piece of literary criticism had already been written (about 20 B.C.) by Horace, and it became known to scholars, though not to its author, as the Ars Poetica. It is written in the discursive fashion which Horace loved; and is full of brilliant lines which embody the wisdom of a skilled writer and accomplished man of the world. Such, for example, are the following sentences and phrases. Each of them contains a world

¹ See Peterson's edition of the Tenth Book, with his introduction (Oxford, 1891); and a separate edition of the First Book by Fierville (Paris, 1890).

of keen observation, and some of them belong to the language of universal criticism:—

> Purpureus adsuitur pannus. Difficile est proprie communia dicere. Parturiunt montes, nascetur ridiculus mus. Ne pueros coram populo Medea trucidet. Scribendi recte sapere est et principium et fons. Ut pictura poësis. Nescit vox missa reverti.

Dr. O. W. Holmes once said of Emerson: "His paragraphs are full of brittle sentences which break apart, and are independent units like the fragments of a coral colony." The poems of Horace are also full of these "brittle sentences" and, taken together, these sentences crystallise the body of his doctrines. The Ars Poetica lacks proportion and is ill-knit; but the essence of it is an injunction to hard labour on the part of the man of letters, to much reading, to self-criticism, and to a deep knowledge of human life. Without these the poet is merely a declaimer who deals with words rather than with things.1 Very much the same thought is elaborated

¹This poem of Horace has been imitated in modern times by the Italian scholar, Gerolamo Vida, in his De Arte Poetica, written in the sixteenth century; by Boileau in his Art Poétique (1674); by Alexander Pope in his Essay on Criticism (1711); and by Lord Byron in his clever but less serious Hints from Horace. See Cook, The Art of Poetry (Boston, 1892), and Weissenfels Aesthet.-kritische Analyse der Ars Poetica (Görlitz, 1880). The best commentary in English is by Wilkins in his edition of the Epistles of Horace (London, 1885). Cf. also supra, p. 180.

by Persius Flaccus, in the first of his satires, which ridicules the artificial character of the literary language of the day.

Quintilian was a winning, graceful writer; he was also a student of language, and a critic of literature. The period in which he lived and taught saw many other attractive writers, and it saw also the pursuit of linguistics in the form of grammar, and likewise an abundance of sound literary criticism. His contemporaries were the Spaniards already mentioned, and likewise Tacitus, the historian, both Plinys, Petronius, Persius, Juvenal, Statius, Silius Italicus, and Suetonius. The teacher of Quintilian himself, Q. Remmius Palæmon (c. 35-70 A.D.), was perhaps the first author of a school grammar in the modern sense. He distinguished four declensions, and his Ars Grammatica (published c. 70 A.D.) contained rules which were more rigid and less elastic than those of the early Roman grammarians. Born a slave, originally a weaver by trade, and noted for his most disreputable character, he was nevertheless extremely popular as a teacher because of his remarkable memory, his glib speech, and his truly Roman gift for serving up knowledge in set formulas.1

¹ See Marschall, De Q. Remmii Palmonis Libris Grammaticis (Leipzig, 1887); also Suetonius, Gram. 23. Cf. Nettleship's study of Latin grammar among the Romans in Lectures and Essays, 2d series, pp. 145-171 (Oxford, 1895); and K. Schmidt, Beiträge zur Geschichte der Grammatik (Halle, 1859).

Teachers of grammar became very numerous during and after the time of Quintilian, and the remains of their treatises have been collected into seven volumes and a supplement by Keil. It may be said, however, that only a few of these so-called grammarians have any genuine knowledge of their subject. They copy from one another, and this copying displays not only their lack of ethics, but their lack of knowledge. Some of the later grammarians do not even understand the teachings which they copy. Remmius Palæmon is mainly responsible for having made Vergil the centre of scholastic instruction for the Roman world, just as Homer was for the Greek. After the first century A.D., the Roman grammarians show little independent research. Their manuals (known as artes) were merely school-books relating to the simplest rules of orthography, syntax, and prosody. Such are the works of Marius Victorinus, Servius, Charisius, Diomedes, and Terentianus Maurus, this last scholar devoting his attention to metres. Two grammarians stand out with deserved prominence. One of them is Ælius Donatus, who lived in the fourth century of our era and was one of St. Jerome's teachers. Apart from his commentaries on Vergil and Terence, Donatus wrote a treatise (Ars Donati Grammaticæ) in two parts. The first part is called Ars Minor and in it he treats only of the eight parts of speech. In the other, called Ars Major, he discusses grammar

¹ Keil, Grammatici Latini (Leipzig, 1855-1880).

more elaborately. The book was so much thought of as a practical treatise, that it was continuously used down through the Middle Ages, and the word *Donatus* (in Chaucer "donat") came to be synonymous with the word "grammar," just as in English "a Webster" means a dictionary, and as in French un Bottin means generically a city directory.¹

The other Roman grammarian whose work has many merits was Priscianus of Constantinople, who taught Latin there in the sixth century A.D. After compiling a number of small grammatical treatises, he published the most complete and systematic Latin grammar that has come down to us from antiquity. It is called *Institutiones Grammaticae*, and is divided into eighteen books. Its importance is largely due to its full quotations from ancient literature.² An epitome of it by the mediæval scholar Rabanus Maurus (c. 776 A.D.) vied with the work of Donatus throughout the Middle Ages.³ For the general principles of grammar, Priscian drew largely on Apollonius Dyscolus, of Alexandria,⁴ who was the founder of scientific syntax (c. 140 A.D.) and of whom Priscian himself said that he was the greatest authority in technical

¹ See Keil, op. cit. iv, and Gräfenhan, op. cit. iv. p. 107.

² He quotes especially from Plautus, Terence, Cicero, Sallust, Vergil, Horace, Ovid, Lucan, Persius, Statius, and Juvenal; and less freely from Cato, Ennius, Lucretius, Catullus, and Cæsar.

³ See infra, p. 229.

⁴ See Skrzeczka, Die Lehre des Apollonius Dyscolus (1869).

grammar, though in this respect his son Ælius Herodianus was undoubtedly a formidable rival, dedicating to Marcus Aurelius a work on prosody in twenty-one books. The grammar of Priscian was so often copied that more than a thousand manuscripts of it still exist.

Contemporary with Quintilian was M. Valerius Probus Berytius, who has been called "the greatest Roman philologist"; but like many of the later Latin scholars his work was almost entirely in the field of text-criticism, with critical signs, as for instance upon Vergil, Horace, Terence, Lucretius, Persius. He likewise wrote a treatise on these symbols. It will be observed that the later grammarians were not of Roman or of Italian birth. Thus, Quintilian was a Spaniard; Probus a Syrian; Suetonius probably a Spaniard; Priscian a native of Cæsarea in Mauretania, though he lived mainly in Constantinople. This plainly shows us that Rome was no longer Roman, but cosmopolitan. After the Spanish Period of its literature came the African Period, represented by such well-known names as Apuleius, Fronto, Tertullian, and perhaps Aulus Gellius. The golden Latin of the Ciceronian and Augustan Ages had changed to the "silver" and later to the "bronze" Latinity. The small group of those who had set the fashion in language at Rome were imitated painfully enough, yet quite inaccurately, by writers of foreign birth. Of this Dr. F. T. Cooper has well said: —

¹ Steup, De Probis Grammaticis (Jena, 1871).

"There was a growing proportion of writers on architecture, surveying, medical and veterinary topics, gastronomy, etc., whose attainments were too meagre to enable them to write correctly, however much they wanted to; and their works naturally contained a strong colouring of plebeian vocabulary. An important influence was also exerted by the no less numerous class of writers whose birthplace was outside of Italy, and whose speech, in spite of education and long residence at the capital, retained, to a varying degree, traces of their alien origin. Even Livy, born in northern Italy, incurred censure for his *Patavinitas*. Under the Empire, the provinces became even more fertile than Rome itself in the production of men of genius; Spain and Africa especially became the centres of veritable schools of literature, possessing marked characteristics, which reacted strongly upon the literature of Rome." 1

It is because the people who had received Roman citizenship, though born and living outside of Italy, were anxious to acquire a correct use of the Latin language, that we find so many grammarians. The very last of them is the Spaniard Isidorus, who died about 636 A.D. He had been Bishop of Seville, and was a man of very wide reading, an eloquent speaker, and one who had been trained in the ancient learning as well as in that of his own time. He never visited Rome until nearly twenty years before his death, whither he went to confer with Gregory the Great. His grammatical writings are two in number, relating to the distinctions and the proper use of words. He likewise wrote a collection of glosses, beside numerous

¹ See Cooper, Word Formation in the Roman Sermo Plebeius, Introduction, xxxv (New York, 1895).

treatises on historical and theological subjects. With him ends the production of grammars that show any original research or that represent original sources. But just as foreigners desired to know the rules of the language which their masters spoke, so they also liked to inform themselves on all sorts of subjects relating to the earlier Roman history. Hence we have a series of Encyclopædists who supplemented the work of the grammarians.

Varro, already mentioned, was the first of these, and from him many succeeding writers borrowed. The Elder Pliny (23-70 A.D.) in his Historia Naturalis had got together an enormous mass of "general information," ranging from prescriptions for the sick, to jewels worn by fashionable women. In the second century, Aulus Gellius wrote his Noctes Atticae in twenty books, on everypossible sort of subject — philosophical, grammatical, historical, and legal, - drawing upon many sources that are now unknown to us.2 One may get an idea of the variety of these scraps by a citation of some of the topics; as, for instance, "The fact that Women at Rome do not Swear by Hercules nor Men by Castor"; "That It is More Disgraceful to be Damned with Faint Praise than to be Bitterly Rebuked"; "Why the Stomach is Relaxed Because of Sudden Fear"; "Concerning King Alexander's Horse which was Called Bucephalus"; "Concerning the

¹ Supra, p. 158.

² See Ruske, De Auli Gellii Noctium Atticorum Fontibus (Breslau, 1883). Best edition of the Noctes by Hertz (Leipzig, 1886).

Ancient Sumptuary Laws"; "Whether Xenophon and Plato were Jealous or Ill-disposed Toward Each Other"; "Concerning the Race and Names of the Porcian Family": "The Force and Derivation of the Particle Saltem." Mainly grammatical, but partly encyclopædic, is the treatise by Nonius Marcellus, an African, in the fourth century. He copied from earlier writers, and most of all perhaps from Aulus Gellius. His book, though not in the least original, has a value of its own for what he has preserved in it. Similar works of easy erudition may be illustrated by St. Jerome's translation of the Chronicle of Eusebius (264- c. 340 A.D.)² with additions which bring it down to the year 378 A.D., and in the same century the very interesting medley by the Græco-Roman senator, Macrobius, whose Saturnalia in seven books is crammed with interesting though by no means authentic anecdotes and conversations, together with jokes and bits of criticism. The form of the whole is copied from the Banquet of Plato, and the substance is derived from many a source.3 A lively turn is given to the Saturnalia by the fact that it is cast in the form of table-talk. The last and almost

¹ De Compendiosa Doctrina, edited by L. Müller (Leipzig, 1888), and Lindsay, (Leipzig, 1903). See Nettleship, Lectures and Essays, pp. 277–331 (Oxford, 1885).

²St. Jerome's rendering of the Scriptures into idiomatic Latin gave following generations a chance to study the plebeian speech.

² See Wissowa, *De Macrobii Saturnalium Fontibus* (Breslau, 1888). Text edition by Eyssenhardt (Leipzig, 1893). There is a good translation of the *Saturnalia* into French by de Roson (Paris).

the greatest of these encyclopædic works is that of Isidorus, called Origines, in twenty books, — an immense survey of all knowledge. Its title is derived from the fact that it professes to give explanations of the various subjects of which it treats. It is in reality nothing but a compilation; yet this and his other similar work, De Natura Rerum, were widely read throughout the Middle Ages and furnished many a hint for those who put together the Gesta Romanorum.¹ It is astonishing how wide was the reading of Isidorus. As Bishop of Seville he allowed his monks to read nothing of the pagan compositions except the grammarians; but he himself raked the literatures of Greece and Rome, picking out with almost a journalistic sense whatever was diverting. He was a great lover of books, having in his library fourteen large bookcases, while his walls displayed the portraits of twentytwo favourite authors. Isidorus was one of the few ecclesiastics who in the sixth century still retained a knowledge of Greek. With him, in fact, the Græco-Roman Period had more than reached its end. The West of Europe was yielding to new masters, Gauls and Goths, and Visigoths, and Germans; and the Dark Ages had, in fact, begun.

[In addition to the other works cited in the present chapter, see Boissier, La Fin du Paganisme (Paris, 1891); id. La Religion

¹ See Dressel, De Isidori Originum Fontibus (Turin, 1874), and infra, pp. 224, 225.

Romaine d'Auguste aux Antonins (Paris, 1906); Michaut, Le Genie Latin (Paris, 1904); Hardie, Lectures on Classical Subjects (London, 1903); Duff, A Literary History of Rome, pp. 664-670 (London, 1909); Teuffel-Schwabe-Warr, A History of Roman Literature, ii. (London, 1892); Kortüm, Geschichtliche Forschungen (Leipzig, 1863); Zingerle, Zu Spätern Latein. Dichtern (Innsbrück. 1873); Arbenz, Die Schriftstellerei in Rom zur Zeit der Kaiser (Basle, 1877); Nettleship, Transactions of the Oxford Philological Society for 1880-81; Boissier, Roman Africa, Eng. trans., pp. 238-289 (New York, 1899); Hodgkin, Italy and her Invaders, 8 vols. (Oxford, 1880-1899); Curteis, A History of the Roman Empire from 375-800 A.D. (London, 1875); Suringar, Historia Critica Scholiastarum Latinorum (Leyden, 1834-5); Norden, Die Antike Kunstprosa. (Leipzig, 1898); Church, The Beginning of the Middle Ages (London, 1895); and Bémont and Monod's Mediæval Europe, pp. 33-124, Eng. trans. (New York, 1906).]

V

THE MIDDLE AGES

A. THE MONASTIC LEARNING

THE gloom of the Middle Ages is foreshadowed in the general vitiation of literary taste which began to be noticeable as early even as the second and third centuries A.D. The immediate causes of this decline are two: (1) the cosmopolitanism of the later Roman Empire; and (2) the spread of Christianity. Rome, as soon as it had fairly secured the mastery of the whole world, ceased, in the course of a single century, to be Roman. The capital became a great gathering-place for men of every rank and language. "The Syrian Orontes," says Juvenal, "has turned its course into the Tiber." 1 Rome's merchant-princes, its knights, its senators, its jurists, its provincial governors, and at last even its emperors, were Greeks, Gauls, Spaniards, Africans, - almost anything but Roman, or even Italian. Brünner has shown almost conclusively that the whole history of the Later Empire is the history of a continuous struggle between the Germanic and the Iberian elements for the control of the government.

In no sphere of activity is this cosmopolitanism more apparent than in literature, when, after the second century A.D., and even earlier, one finds the great names of its masters to be the names either of Spaniards, or Gauls, or Syrians, or Sicilians, or Africans. The result of this denationalising of Roman literature showed itself before very long in the neglect of all that was best in the native literary traditions. Not only Ennius, Plautus, Terence, Lucretius, and Varro ceased to be read; but even Vergil, Horace, and Ovid were regarded as old-fashioned. It is, indeed, evident that Gauls and Spaniards and Africans, learning Latin as a foreign language, would be unable to appreciate the niceties of diction, the exquisite appropriateness of phrase and epithet, and the more delicate cadences and rhythms that mark the work of the highly trained writers of the Golden Age of Latin literature. Prosody was the first to suffer, since in Latin it was always an artificial thing and largely foreign to the uneducated, who more readily caught the accented beat of the Saturnians or the alliterative jingle of the carmina triumphalia. Hence, as early as 250 A.D., we find Commodianus writing his Carmen A pologeticum in hexameters that frankly discarded syllabic quantity and accepted accent as the basis of his metrical system; and it is unlikely that very many of his readers knew the difference. The language itself also suffered in the mouths and on the pens of foreign writers. Prepositions govern what-

ever cases appear to be most convenient. Nouns become heteroclite with surprising facility. Conjugations change places; and there is a wild dance of genders. Of course these extreme breaches of morphology and syntax are far from universal; but the nicer distinctions of the language were lost to the perceptions of both readers and writers. Hence it was that, the sense of style having been blunted and destroyed, the second and third centuries studied the rhetoricians, and read not so much the great writers of Rome, as abridgments of them. It was an age of epitomes, of condensations, of scrap-books and elegant extracts; of florilegia and spicilegia. This explains why so many of the most valuable productions of the earlier centuries have not come down to us at all; and why others have been preserved in meagre abridgments, or in abridgments of abridgments. Such were the treatises in Greek by King Juba of Mauretania, whose Θεατρική Ίστορία is now lost, though much used by Julius Pollux, in his 'Ονομαστικόν, a dictionary in ten books arranged by subjects; Hephæstion, a writer of a work on metres in forty-eight books, all lost, though his own epitome of them survives; Valerius Harpocration, who wrote a lexicon to the ten orators; Herennius Philon of Byblos (sometimes called "Philobyblos"), whose books were mainly lost except in one; and Pamphilius, whose ninetyfive books on glosses were epitomised until they were only five.

The spread of Christianity was perhaps even a more important factor in blotting out a taste for literature and destroying the literary records of the past. The general failure to appreciate and admire what was fine in the productions of the preceding centuries was only a negative injury. The teaching of the Christians, on the other hand, was aggressively and offensively directed toward their destruction. In the early days of the Church, Christianity spread chiefly among the ignorant, who not only failed to value what was æsthetically precious, but felt that suspicion and dislike which the vulgar always exhibit toward what they cannot understand. Later, when men of education and culture - men like St. Augustine and St. Jerome - appeared, they regarded the writings of the pagans as thoroughly pernicious in their influence, — all the more because they could themselves appreciate their attractiveness and power. St. Terome was, in fact, a scholar and thoroughly familiar with classic literature; and this was even made the basis of an accusation brought against him by his fellow Christians. He was at last openly charged with defiling his works with quotations from pagan authors; of having employed monks to copy the writings of Cicero; and of having even on one occasion polluted the minds of some children at Bethlehem by explaining to them various passages of Vergil.¹ He tells us in one of his Epistles how he was rebuked in a

¹ Epist. lxx; adv. Rufinam, I. ch. xxx.

dream for his guilty admiration of Cicero, being borne in the night before the throne of Christ, accused of "being a Ciceronian rather than a Christian," and scourged by the angels so that when he awoke in the morning his shoulders were covered with bruises.1 Pope Gregory I (the Great) rebuked Desiderius, Bishop of Vienna, for having taught the classics and thus "mingled the praises of Jupiter and Christ . . . polluting the mind with blasphemous praises of the wicked." 2 It was believed and taught that the writers of the classics were burning in hell. In such monasteries as still kept any of the manuscripts of the secular literature, and where vows of silence were imposed, it was customary when any monk wished a copy of Vergil, Horace, or Livy, to indicate it by scratching his ear like a dog, this being the animal whom the pagan writers were supposed to resemble.3

With men of a sterner and fiercer type, — zealots like **Tertullianus** and fanatics like **Montanus**, — the whole mass of pagan literature was sweepingly and savagely condemned. Its philosophy was a snare and a stumbling-block; its history lies and slanders; its poetry licentious and obscene; the mythology of its graceful fables, a plain enticement to the worship of demons. Tertullian in a

¹ Epist. xxii.

² Lecky, vol. ii. p. 201.

³ Maitland, *Dark Ages*, p. 403. (London 1853). Because of their hostility toward the classic writers, Julian the Apostate forbade Christians to teach rhetoric and grammar (classics) in the schools.

fiery passage of his De Spectaculis denounces the gods of the mythologues as devils, the worship of them as devilworship, and the prose and verse that celebrates them as devil-literature. This was the age when asceticism suddenly burst into life to teach men that salvation in the next world was incompatible with comfort in this; that the enjoyment of the beautiful in literature and art was of the flesh; and that squalor and filth and intellectual ignorance paved the way to a heaven beyond the grave. To the early ascetics, the refined pleasure of pure literature was as dangerous and little less sinful than the love of women. Hence, we find St. Anthony, the founder of monasticism, refusing to learn the alphabet. Hence, another priest, who was famous as a linguist, voluntarily imposed upon himself the penance of silence for thirty years; and another who found in the cell of a brother monk a few books, reproached him with having defrauded of their property the widow and the orphan. All learning was pernicious, and it was the boast of St. Benedict to be described as nescius et indoctus. "It is the duty of a monk," said St. Jerome, "to weep and not to teach."

Literature, in fact, was in the minds of the early Christians as much associated with the cult of paganism as was art; and both suffered alike as soon as the Christians gained control of the civil power. The images of the gods were mutilated and broken; the most famous masterpieces of ancient art were destroyed because they de-

picted subjects from the classic myths; and so, the rolls of papyrus and vellum which contained the writings of the myth-makers shared a similar fate. It was an anticipation of the Puritan frenzy of the sixteenth and seventeenth centuries, when so many cathedrals were desecrated, so many paintings of the saints destroyed, and so many priceless carvings broken into bits, because they gave beauty and significance to the ritual of the Catholic Church. The same species of fanatical frenzy marked the course of the early Christians. Innumerable rolls of papyrus covered with copies of the great masterpieces of Roman literature were used for wrapping goods. ments were scraped of their original texts and used again (palimpsests) for religious writings. The libraries that contained them were pillaged by mobs. In 389 (or 391), under Theodosius, that part of the Alexandrian Library which then stood in the Serapeum was sacked, and the books partly burned and partly scattered. The library at Nisibis and the greater one of 100,000 volumes at Constantinople were both burned (477); and Pope Gregory I (c. 600) is said to have allowed the noble Palatine Library at Rome to be destroyed.1

¹ This, however, is only traditionally reported. The favourite saying of Gregory was that "the oracles of God are greater than the rules of grammar"; and he is discreditably distinguished for his zeal in burning the manuscripts of Livy because they ascribed so much power to the heathen gods. — See Draper, Hist. of the Intellectual Development of Europe (New York, 1899); Lecky, ii. 201; Guingerié, Hist. Littéraire de l'Italie, i, pp. 29-31.

Other causes than the two already mentioned greatly diminished the world's supply of books and rendered more difficult the renewal of that supply. The separation of the Eastern from the Western Empire had had a very unfavourable effect upon the collection and preservation of books, dividing, as it did, the learning of the East from the learning of the West. The Roman librarians ceased to collect works written in Greek, and the Byzantian librarians, who had never cared much about Roman literature, now felt no interest in it whatsoever. Finally, the conquest of Egypt by the Arabs in A.D. 641, destroyed at a blow what still remained of the Alexandrian libraries and shut off from Europe the supply of papyrus upon which the makers of books depended.

All these facts must be considered in accounting for the loss of so many works of classical literature whose renown ought to have preserved them, and also for the comparatively few manuscripts of early date that are now known to exist; the neglect of good literature, the growing ignorance of the people, the hostility of the Christians to classical learning, the destruction of books and libraries, and the barbarisation of the Empire. In the sixth century, one might, amid the deepening social and intellectual darkness of the Western World, have felt safe in predicting that the literary splendour of Greece and Rome would soon be only a faint and dying memory, never again to be quickened into a living fact. That this

was actually not the case is in a very large degree due to the energy, the influence, and the example of a single man.

Early in the sixth century occurred an event which in itself would seem to have no possible connection with the history of classical philology or the preservation of classical learning, and yet which was, in fact, one whose importance to the student of palæography can scarcely be exaggerated. About the year 529, one Benedict, a native of Nursia, founded the order of monks that took from him the name of Benedictines. Monachism had already arisen and had an extraordinary vogue in the Eastern Empire, having begun with St. Anthony and spread so rapidly that his first disciple, Pachonius, lived to see himself the head of seven thousand followers. Within a single century we find it recorded that in the one district of Nitria, in the Egyptian Delta, there were no less than fifty monasteries.1 Yet in the East, almost from the beginning, the system was notorious for its gross abuses. There sprang up a class of monks called Sarabastæ, who lived in small communities, and frequently wandered about the country, leading in many cases a life of idleness and open profligacy. Even in the monasteries, the want of any well-defined regulations left the door open to all sorts of licentious practices which tended to bring the whole institution into contempt and scandal. In fact, the Christian Church in

¹ See Möhler, Geschichte des Mönchthums (Regensburg, 1866–68); Harnack, Das Mönchthum (Giesen, 1895).

its early years really found its greatest danger not in the persecutions of the pagan emperors and governors, but in the character of many of its own members. "Men entered the Church to escape from military service, or to avoid burdensome municipal offices"; worn-out rakes who had exhausted every other form of excitement, harebrained enthusiasts in search of a new sensation, vicious and depraved men and women impelled by curiosity, all these flocked around the teachers of the new faith in the expectation of a fresh stimulus to their jaded fancies. Hence, almost immediately, arose scandals and extravagances of which the details are given by contemporary writers.¹ The festivals of the martyrs were at one time suppressed by the authorities because of the licentious manner of their celebration. The pilgrimages to Palestine attracted such motley crowds that the Holy Land is described by St. Gregory of Nyssa as a hot-bed of debauchery. Even the Agapæ, or love-feasts, often became drunken orgies. All these evils were concentrated and condensed in many of the oriental monasteries, which were often filled by men who made the profession of Christianity only a pretext for the practice of the most filthy vices.

It was at a time when monachism as then understood

¹ See Jortin, Remarks on Ecclesiastical History, 5 v. (1751-53); Cave, Primitive Christianity, pt. I. ch. xi (London, 1687); Müller, De Genio Aevi Theodosiani (Copenhagen, 1797); Lecky, History of European Morals, ii, pp. 149 foll. (Am. ed., New York, 1884).

and practised had fallen into such disrepute, that St. Benedict (529 A.D.), founded his famous Order at Monte Cassino, about halfway between Rome and Naples. It was a place destined to be of the utmost importance in the history of classical texts and learning. Benedict was a man of little education, but of a very spiritual mind, of an unblemished character, and gifted with an unusual amount of common sense as well as of piety. He had been made the abbot of a monastery of the Eastern type, and had left it in disgust at the license which he found prevailing there; but his experience was useful in suggesting to him the defects of monachism as then understood. He saw that it was not enough that the monks should be required to fast and pray and sing at certain times, while their remaining hours were left to idleness; but that some rule should be devised to give them rational and wholesome occupation and to provide for a stricter discipline. To this end he composed in the year 515 his famous Regula Monachorum, which ultimately became the universal rule of monachism in the Western Church. It is not necessary here to go into its details. It required continual residence in the monastery; laid out a scheme of manual labour for the monk's spare hours; and above all, it recognised the desirability of mental as well as bodily occupation, permitting such monks as were qualified, to engage in teaching and in copying manuscripts for the library.

¹ The date is only traditional. Some give it as 520.

St. Benedict had, of course, no thought of preserving the secular learning of the age, and intended the literary labours of the monks to be spent wholly upon ecclesiastical and theological writings; but he did not so specify, and the permission given by his Rule soon received an interpretation fraught with momentous results to modern scholarship.

In the year 540, Flavius Magnus Aurelius Cassiodorus, a Roman patrician of senatorial rank, descended from a rich and noble family of Bruttii, praefectus urbi under four of the Gothic kings, and secretary to King Theodoric, entered the Benedictine monastery of Vivarium which he himself had founded (529), and took the vesture and the obligations of a monk. Cassiodorus had been during his public life not only a man of the world and a statesman, but a scholar and writer, one of the few men remaining in the Western Empire who had studied with care the earlier literature of both Greece and Rome; and after his retirement to the monastery, his tastes remained unchanged, while the more ample leisure of his new life gave him far more opportunity to cultivate them. own writings as a monk were purely theological; but, taking advantage of the rule which enjoined copying and teaching, he began systematically to train the younger

¹ During his public life he wrote on the liberal studies, and put forth a treatise, *De Arte Grammatica*, which was used as a text-book throughout the Middle Ages. See Hodgkin, *The Letters of Cassiodorus* (London, 1886); Church, *Miscellaneous Essays*, pp. 191–198 (London, 1888).

monks to an appreciation of the value of the secular literature and to encourage by every possible means both the collection and preservation of classical manuscripts and the multiplication of them in careful copies. Possessed of a very large fortune, and being a man of great influence and energy, he laboured incessantly to the end of his long life for this important object, with such success that he actually succeeded in making every great monastery of his Order "a sort of Christian Academy," a storehouse of classical literature, with its scriptorium or writing-room especially set apart for the copying of parchments. than this, he made the Benedictine Order essentially a learned Order, with traditions of scholarship which have been honourably maintained to the present day.1 How great a debt is owed to Cassiodorus in modern times, and how general had been the destruction of manuscripts that were written near the time of their original composition, is seen by recalling the dates of the early codices in existence. Thus Æschylus, and a part of Sophocles, are found in the so-called Laurentianus (or Mediceus) at Florence, belonging to the eleventh century. The oldest manuscript of Herodotus goes back to the eleventh century, that of Thucydides to the tenth century, and that of Plato to the ninth century, — though this is incomplete. The oldest manuscript of Plautus is a palimpsest preserved at Milan,

¹ See Olleris, Cassiodore, Conservatur des Livres de l'Antiquité Latine (Paris, 1884); Montalambert, The Monks of the West, Eng. trans., pp. 71-78 (London, 1861).

and was written as early as the fifth century; but it contains only a few odd sheets, the other codices being as late as the eleventh or twelfth century. The oldest codex of Horace belongs to the ninth century; the oldest of Lucretius to the tenth century. The oldest codices of Vergil are as ancient as the fourth century,—two of them being in th Vatican and one at Florence, this latter having corrections made by Asterius, Roman consul in the year 494 A.P.

¹ Fragmentary papyri as old as the first century B.C. exist, and a codex in fragments of the sixth century.

² It may be interesting to mention some of the other important in the scripts. Thus, of Homer, the oldest codex is the Codex Venetus F of the tenth century (Iliad), and of the twelfth century (Odyssey); of Her vietus, the Codex Florentinus or Mediceus in the Laurentian Library of the tenth century; of Æschylus, a Codex Laurentianus (or Mediceus) of the eleventh century; of Sophocles, the same codex with Æschylus; of Euripides, a Codex Vaticanus of the twelfth century; of Aristophanes, a Codex Ravennas of the eleventh century; of Thucydides a Laurentianus of the tenth century; of Plato, a Codex Clarkianus (Bodleian) of the ninth century; and of Demosthenes, a Codex Parisinus of the eleventh century. Of Latin authors, among others we have of Plautus a Codex Ambrosianus (Milan) of the fifth century (palimpsest); of Terence, a Codex Bembrosias (Vatican) of the fifth century (mutilated), the rest of the ninth century; of Lucretius, a Leidensis of the ninth century; of Catullus, a Codex Parisinus of the ninth century (only a part), the rest of the fourteenth century; of Cicero, six Codices Parisini of the ninth century; of Cæsar, a Codex Amstelodamensis A of the ninth or tenth century; of Sallust, two Codices Parisini of the tenth century; of Vergil, a Codex Vaticanus of the fifth century; of Horace, a Codex Bernensis (incomplete) of the ninth century; of Ovid, a Codex Petavinas (from A. Petavius, Cy. xvi.) of the eighth century; of Livy, the Codex Veronensis (bks. iii.-vi.) of the fifth century (palimpsest); of Tacitus, a Codex Mediceus of the ninth century; of Juvenal, the Codex Pithœanus (from P. Pithou) at Montpellier of the ninth century; of Martial, a Codex Parisinus T of the ninth century; of Pliny the Elder, a

These facts are quite sufficient to show that with scarcely exception the only manuscripts of the best classical hors that give anything more than isolated fragments copies made later than the fifth century. Had it not in for the labours of the Benedictines and of those who lowed their example, the remains of classical literature ald have been so scanty as to give us no real conception hat literature and learning as a whole.

Vith St. Benedict must be mentioned the Roman patrinal and scholar who is said to have been his friend. This was Anicius Manlius Torquatus Severinus Boëthius (or Boëtius), almost the last of the Western Romans to possess a good understanding of Greek. He gained the esteem of Theodoric, King of the Ostrogoths, who made Rome his capital in the year 5000. Over the Goths, Boëthius exercised such influence that his countrymen found little oppression in the Gothic rule. In the end, however, he was accused of treason, his property was confiscated, and after being imprisoned, he was executed (c. 524) with terrible cruelty. While in prison, Boëthius wrote his dialogue entitled De Consolatione Philosophiae. It was divided into five books, and was written in a close imitation of the best Latin models, while the poetry which is interspersed shows

palimpsest from the monastery of St. Paul in Carinthia of the sixth century (bks. xi.-xiv.); of Pliny the Younger, a Codex Laurentianus (Mediceus) of the ninth century; of Quintilian, a Codex Bernensis of the tenth century (incomplete); of Suetonius, a Codex Memmianus or Parisinus of the ninth century.

metrical accuracy. For seven centuries he was held in great reverence, and even in later times his work was not forgotten. He is the first writer who shows a knowledge of the Arabic (Hindu) numerals. The *Consolatio* found many translations, among them one by King Alfred into Anglo-Saxon, and by Chaucer and Queen Elizabeth into English.¹

Now that western Europe had been overrun by foreigners speaking every sort of language and dialect, one might have supposed that the Latin language would have sunk into disuse. But just the contrary was the case. It was the only stable language known to men of that time. Its dignity and masculine brevity made it a fit medium of intercourse between kings and princes. Finally, it was the language of the Church, and the Church was slowly conquering the barbarians who had overrun the provinces of ancient Rome. Nevertheless, as the spirit and history of Latin literature were unknown, merely the faintest possible tinge of grammatical and technical knowledge could be imparted to students who tried to get a smattering of the language for practical purposes only. Even those who knew how far they were from any real knowledge of what they were studying, gloried in their ignorance, and made a boast of it. Grammar was regarded as pedantic. A

¹ The most modern translation is by James, (London, 1897). See, also, Hildebrand, *Boëtius und seine Stellung zum Christenthum* (Regensburg, 1885); and Stewart, *Boëthius* (Edinburgh, 1891).

knowledge of its rules was held to be somewhat discreditable. One of these scholars (Wolfhard in the Life of St. Walpurgis) speaks of his own barbarisms of style, but tells the reader that his dung-heap is, nevertheless, full of pearls. Gregory the Great had spoken still more forcibly at an earlier date. "The place of prepositions and the cases of nouns I utterly despise, for I consider it indecent to confine the words of the heavenly prophets within the rules of Donatus." A priest of Cordova uttered the same thought with a vigour that verges almost upon ferocity. "Let philosophers and the impure followers of Donatus," he says, "ply their windy problems with the barking of dogs and the grunting of swine, snarling with skinned throat and bared teeth: let the foaming and bespittled grammarians belch wind, while we remain the evangelical servants of Christ." Even as late as the fourteenth century the well-known anecdote of the Emperor Sigismund at the Council of Costnitz is characteristic of the popular feeling about grammar. In a speech against the Hussites he had used the word "schisma" as a feminine noun, for which he was corrected by a monk, who called out that schisma was a noun of the neuter gender. Whereupon the emperor asked, "How do you know it?" "Because Alexander Gallus says so." "And who is Alexander Gallus?" "A monk." "Well," said Sigismund, "I am the Emperor of Rome, and I fancy that my word is as good as any monk's."

That the Church did not do more to keep alive the spirit of learning is not, however, to be counted against her. We ought rather to feel surprised that she did so much. The conditions of her existence and the difficult mission that she had to perform have been very fairly summed up by Mr. J. A. Symonds:—

"The task of the Church in the Middle Ages was not so much to keep learning alive as to moralise the savage races who held Europe at their pleasure. . . . After the dismemberment of the Empire, the whole of Europe was thrown open to the action of spiritual powers who had to use unlettered barbarians for their ministers and missionaries. To submit this vast field to classic culture at the same time that Christianity was being propagated would have been beyond the strength of the Church, even had she chosen to undertake this task, and had the vital forces of antiquity not been exhausted." ¹

The worst feature of the mediæval spirit was that it had lost the power of appreciating, even in the slightest degree, the classic sentiment. To scholastics, classicism was absolutely a sealed book. The free air of paganism, its passionate love of beauty, its abounding life and virility and colour and richness were as remote from the conception of the mediæval monks as the sunlight is remote from the conception of one who is congenitally blind. Whatever they studied they studied in the spirit of Scholasticism. Their criticism was warped and cramped and distorted by theology. If, for instance, they

¹ Symonds, History of the Italian Renaissance, i. pp. 61, 62 (London, 1875).

admired Vergil's famous Fourth Eclogue, they admired it, not because it was in itself a beautiful piece of verse, but because they thought it a prophecy of the approaching birth of Christ. The most licentious passages of Ovid were explained allegorically, just as modern commentators have explained the sensuous Hebrew of the Song of Songs. If they taught grammar, they filled it full of strange subtleties, discovering the three Persons of the Trinity in the verb, and mystic numbers in the parts of speech. Words were even defined theologically, as when the scholastics after defining voluntas as expressive of the nature of God, and voluptas of the nature of the Devil, then coined the blended form voluntas as expressive of the mixed nature of man. It is easy to imagine what remarkable feats of ingenuity their etymological speculations exhibit.

Nevertheless, although the Church's task was to moralise the barbarians, education was one of its chief instruments. It rejected the pagan literature while it retained the language in which that literature had been written; and after paganism was thoroughly extinct, the literature itself was revived and taught in the monastic and other schools during the Middle Ages. It is somewhat difficult to define exactly what period of time lies properly within the mediæval age. The decline began when Constantine transferred the seat of the Empire from Rome to Byzantium (Constantinople) in 330, because, after that, Rome itself lost its chief significance both politically and from the

standpoint of scholarship. Its records become more and more melancholy with advancing time. Its officials flocked to another and a foreign city. The emperors had not only turned their backs upon its gates, but upon its language and its civilisation. Henceforward Rome's population diminished. Its temples fell into decay, and there began to brood over it the portent of destruction. The new Cæsars carried away the archives, and it lost the prestige of the imperial court. Some of its rulers never visited it at all. The Emperor Constantius had been in power several years before he saw the former capital of the Empire, and then he journeyed to it only at the request of a barbarian prince whom he was entertaining, and who was anxious to behold the city which had once been mistress of the world. The historian, Ammianus Marcellinus,1 (c. 330-c. 378 A.D.), gives an interesting account of this visit. Constantius himself seems to have been astonished by the magnificence of Rome.

"As the Emperor gazed upon the vast city spreading along the slopes, in the valleys, and between the summits of the hills, he declared that the spectacle which first met his eyes surpassed everything that he had yet beheld. Now his gaze rested on the temple of Tarpeian Jupiter, now on baths so magnificent as to resemble entire provinces, now on the massive structure of the Colosseum, mightily compact, the summit of which seemed scarcely accessible to the human eye; now on the Pantheon, rising like a fairy dome, and its sublime columns with their gently sloping stairways adorned

¹ Ammianus Marcellinus was himself a Greek by birth, though he wrote in Latin — the Latin of a foreigner, often clumsy and often affected.

with statues of heroes and emperors, besides the Temple of the City, its Forum, the Forum of Peace, the Theatre of Pompey, the Odeon, the Stadium, and all the other architectural wonders of Eternal Rome. When, however, he came to the Forum of Trajan, a structure unequalled by any other of its kind throughout the world, so exquisite indeed that the gods themselves would find it hard to refuse their admiration, he stood as if in a trance, surveying with a dazed awe the stupendous fabric which neither words can picture, nor mortal again aspire to rear. Being asked what he thought of Rome, the Emperor replied that in one respect only was he disappointed, and that was in finding that its inhabitants were not immortal."

Not long afterward, in the reign of Honorius, Rome witnessed her last great imperial spectacle when that emperor entered the city to celebrate his triumphs over the Goths (403). There is something pitiful in the attitude of this great city, which was still the most magnificent of any in the world, accepting with almost hysterical gratitude the visits of curiosity which its emperors from time to time condescended to give it. Its very beauty, its maze of porticos, its wilderness of marble, bronze, and gold, and its gigantic palaces gorged with pictures, statues, and jewels, only heightened the melancholy of its decadence, with a diminishing population now grown too small to crowd its streets and too unwarlike to defend its walls.

It is really then from the year 330 that we must date **The Beginning of the Middle Ages.** In 395, the Roman Empire practically embraced the entire Christian world from East

¹ Res Gestae, xvi. 14 foll.

to West, and southward to the great Sahara. Yet already there were stirrings in the North and West, among the Germans whose six tribes were already rolling like a wave toward Italy and the western possessions of Rome. In 410, Alaric headed the Visigoths, penetrated Greece, and later, streaming through Italy, sacked the great city which for eight hundred years had never fallen into the hands of an enemy. In 415, Spain became an independent kingdom under Teutonic invaders, the Burgundians established themselves in southeastern France and Switzerland, and later were amalgamated with the new Frankish kingdom. In 440, the Angles, Saxons, and Jutes invaded and conquered Britain. Worse than all, there menaced Italy the savage and ape-faced Huns of Ugro-Finnic stock, whose hideous customs made them seem a host of demons rather than an army of mortal men. Yet they did not remain very long on Roman soil, since they were routed in Gaul (at Châlons) by the allied Romans and Teutons (451), one hundred and sixty thousand men having perished in the battle, which was even more epoch-making than those of Thermopylæ and Marathon. But the Roman Empire in the West was destined to destruction. In 455, the Vandals sailed across the Mediterranean from Africa, and plundered Rome. In 476, the Herulian Goth, Odoacer, became emperor of the West, receiving a timorous consent

¹ Ostrogoths, Visigoths, Vandals, Burgundians, Franks, and Suevi. See Gregorovius, *History of the City of Rome in the Middle Ages*, Eng. trans., i. chs. iv-v (London, 1894).

from the emperor in Constantinople. Thus, one may say that the Middle Ages began, either with the transfer of the capital to Constantinople in 330, or with the establishment of Gothic power in Italy in 476. A convenient time from which to date **The End** is the year 1453, when the Eastern Empire fell, and the triumphant Muhammadans poured through the gates of Constantinople.

The history of scholarship in the Middle Ages, so far as concerns western Europe, is conveniently divided into the Early Christian Period (300-751), the Carolingian Period (751-911), and the Period of Scholasticism (911-1476). During the first of these three periods, the leaven of civilisation was at work trying to bring about something like order among the rude barbarians who had shattered and mastered the Western Empire. One great source of civilisation lay in the retention of the Latin language. It was not, as is often said, the influence of the Church alone that made Latin the chosen speech of the invaders as soon as they had become settled in their new possessions. was also the urgent need of having some one intelligible medium of communication, - a language which Goths and Visigoths, Franks, Burgundians, and Vandals could use with the certainty of being understood. All the dialects and patois of Germany and Jutland were cast, as it were, into the one great crucible. They were simmering and uniting and separating, and taking on continually new forms and new idioms. There was a chaos of human

speech, and amid it the Latin language alone was the one stable, settled, and fit instrument for the purpose for which men used it. A little later, the Church confirmed this selection; and when, even in the Dark Ages, men still attempted to write and teach philosophy or theology, and the elements of a learning that had been well-nigh lost, it was but natural that they should employ the only language which they knew, and which was capable of expressing accurately and easily their conceptions. All these reasons together, — the need of a universal language, the usage of the Church and the requirements of scholarship, gave Latin very great prominence. It spread from the courts and monasteries and churches, into the mouths and the understanding of the common people, so that it was once more almost a genuine vernacular. Of this fact proofs are not wanting. In the fourth century, during the reign of Theodosius, a Gaul addressed the Roman senate in the lingua Romana rustica, rude and rough, but still intelligible to his hearers. There were still compositions written in Latin during the fifth and sixth centuries, and intended for the common people. Fortunatus,1 writing in Latin the life of Saint Aubin, says in his Introduction that he will be careful not to use any expression that may be unintelligible to the populace. A popular song in very good Latin has come down to us celebrating the victory of Clotaire II over the Saxons in 622. In the same century,

¹535-600. Edition by Leo and Krusch (Berlin, 1881-1885).

Baudemind composed the life of Saint Amandus for public reading, and wrote it in fairly grammatical Latin. Latin was also universally employed in public documents and public correspondence. And not merely was it written and spoken as a matter of necessity, but some of the men least capable of succeeding were fired with an ambition to gain honour from its use. Gregory of Tours1 informs us that Chilperic I. attempted Latin verse; and there still exists a letter written in metrical Latin by Auspicius, Bishop of Tours, to a Count who bore the barbarous name of Arbogastes. The growth of the papal power did a great deal to propagate and protect the use of Latin. There was constant communication between the Papal Court and the newly founded States, and it was all in Latin. The bishops of the Church were nobles of the kingdoms and of the Empire, and they made Latin the language of the courts. The papal legate presided over royal and imperial councils,

¹ The Latin of Gregory himself is interesting as seen in his History of the Franks. It shows how even with educated men like himself Latin literature was fading from remembrance. He quotes Vergil, but unmetrically. His citations from other Latin writers are probably borrowed. He uses the accusative absolute and apparently does not know that subject and verb should be in agreement. In him e and i are confounded; aspirates are practically disregarded; and he pronounces c before i and e like s. See Bonnet, Le Latin de Grégoire de Tours (Paris, 1890); Monceaux, Le Latin Vulgaire, in the Revue des Deux Mondes (July 15, 1891); du Méril, Poésies Populaires Latines antérieures au Douzième Siècle (Paris, 1843); Nisard, Essai sur les Poêtes Latins de la Décadence (Paris, 1867); Olcott, Studies in the Word Formation of the Latin Inscription (Rome, 1898), and Grandgent, Vulgar Latin (Boston, 1908).

and so the deliberations were in Latin. Indeed, the breach between the Greek Church and the Roman Church was due very largely to the fact that the Eastern Church would not accept the Latin language as its official tongue. The Roman Church did well in not yielding. Latin is essentially a liturgical language. Lacking some of the Hellenic grace, its sonorous sentences and majestic periods seem made for the stateliness of worship.

Of course the mingling of Latin with the so-called barbarous tongues, injected into its vocabulary a large number of unusual words, just as the syntax was violently deranged. Paratactic sentences and illiterate spelling were to be expected, and likewise an extensive use of prepositions. On the other hand, it must be remembered that all these things had been common enough in the language of the ignorant, even during the Golden Age, as may be seen plainly in the plebeian inscriptions, and in such writers as Persius and Petronius and St. Jerome. The Latin of literature was never identical with the Latin of men's daily speech. Therefore, when we come upon a period of literary sterility, we find what should be called a reversion to popular usage rather than an absolute corruption of what had previously been refined and regular. The plebeian speech comes to the surface everywhere, and sweeps away book language. This vulgar Latin lasted long, even in remote parts of Europe, and among the illiterate; so that Dante calls the Sardinians "apes" (simiae) because of their assiduous imitation of Latin. In like manner, so soon as there ceased to be any definite standard of versification, the nicely balanced quantitative system so carefully wrought out, from Ennius to Ovid, gives way to an accentual system which is not new, but really very old — older even than the Hellenizing Period of Latin literature. Ennius, the populace chanted rude ditties that were rhymed and full of alliteration. After the downfall of western culture, the same sort of poetry again is common. Indeed, accentual rhythm and rhyme were not established by the Church in the Christian hymns; but rather did the priestly poets compose hymns in the sort of metres that were most familiar to their congregations. Some of these hymns are very beautiful, and they retain their place in the literature of succeeding ages, - such of them, for example, as the Dies Irae, Veni, Creator Spiritus, and Mortis Portis Fractis, Fortis, this last by Peter the Venerable.1

A good example of semibarbarous Latin prose is given by Dräger in the Introduction to his *Historische Syntax*. It is from a life of Theodoric the Ostrogoth (c. 454-526):—

"Rex vero vocavit Eusebium, praefectum urbis Ticeni, et inaudito Boetio protulit in eum sententiam. Qui mox in agro Calventino, ubi in custodia havebatur, misit rex et fecit occidi. Qui accepta corde in fronte diutissime tortus est, ita ut oculi eius creparent. Sic sub tormenta ad ultimum cum fuste occiditur."²

¹ See Duffield, Latin Hymns (New York, 1889); and du Méril, Poésies Latines du Moyen Âge (Paris, 1847).

² A very admirably written monograph, full of illuminating illustrations, is Clark's Studies in the Latin of the Middle Ages (Lancaster, Penn., 1900).

As is well said by Dr. V. S. Clark: "Barbarism in Latinity is a relative term, and it is impossible to set an exact date for its beginning. It was a matter partly of individual writers as well as of age." We can find barbarisms in Latin during the classical period that match precisely some of the barbarisms of the mediævals. We must remember that Latin remained throughout the Middle Ages practically the mother tongue of all the professional and official classes, for it was the language of the Church, the law courts, and of both religious and secular instruction. On the other hand, among the peasants, it gradually decayed or rather, perhaps, was transmuted into the Romance languages; so that the literary language was styled lingua Latina, while the common speech was called lingua Romana. "It is probably impossible to determine just when Latin ceased to exist as a spoken language among the common people. But the question of peasant dialects, while it may be interesting from the standpoint of Romance philology, has very little to do with the transmission of literary Latin through the Middle Ages. What we are concerned with is the extent to which Latin was understood by people who, even though illiterate, or nearly so, on account of their position in social and economic life, correspond in a general way to what we now sometimes term 'the reading classes,' - townspeople and small landholders, traders, and the better class of artisans and craftsmen, - the Canterbury

¹ Supra, p. 210.

pilgrims of the latter half of the first decade of Christian centuries. It is natural to suppose that people of this class understood Latin and continued to employ it occasionally long after it had ceased to be the ordinary medium of communication." ¹

Something like a definite learning appears during the reign of Charlemagne (c. 800). This monarch's chosen adviser was the great mediæval educator, Alcuin, who Latinized his name into Flaccus Albinus. He was born at York, where he became the head of a large school. Later, in Italy, he met Charlemagne, who said, "Come to my court and teach my subjects the liberal arts." Alcuin gladly accepted the invitation, and at first taught the Emperor himself in rhetoric and logic. To aid him in his work, Charlemagne established a court school (Schola Palatina). Alcuin also founded new schools throughout France and improved those which already existed. At Tours he set up a seat of learning modelled after his own school at York. Alcuin, though imperfectly trained, was the greatest scholar of his time; for, in addition to knowing Latin fairly well, he had a smattering of Greek and Hebrew. Among his works are especially to be noted a Rhetoric and a Grammar, the principles of which are drawn and partly garbled from the

¹ See Muratori, Ant. Ital. Dissertatio XLma. Cf. also du Méril, Poésies Populaires Latines, p. 264 (Paris, 1843). Poggio in his Historia Convivialis mentions the fact that Latin was spoken by the women of Rome in his day (1380), and that he had learned from them Latin words that he had never heard before. See Clark, op. cit., p. 15.

writings of Cicero. Both of these books are ill-digested, and are imbued with a clumsy wit, intended, no doubt, to divert the scholar. Thus, Alcuin gives an imaginary dialogue between himself and his imperial pupil.

Alcuin. What art thou?

Charles. I am a man (homo).

Alcuin. See how thou hast shut me in.

Charles. How so?

Alcuin. If thou sayest I am not the same as thou, and that I am a man, it follows that thou art not a man.

Charles. It does.

Alcuin. But how many syllables has homo?

Charles. Two.

Alcuin. Then art thou those two syllables?

Charles. Surely not; but why dost thou reason thus?

Alcuin. That thou mayest understand sophistical craft and see how thou canst be forced to a conclusion.

Charles. I see and understand from what was granted at the start, both that I am homo and that homo has two syllables, and that I can be shut up to the conclusion that I am these two syllables. But I wonder at the subtlety with which thou hast led me on, first to conclude that thou wert not a man, and afterward of myself, that I was two syllables.

Still more characteristic of Alcuin's teaching is a part of the dialogue in which Pepin, "a royal youth," questions Alcuin (Albinus) as follows:—

Pepin. What is writing?

Albinus. The guardian of history.

Pepin. What is language?

Albinus. The betrayer of the soul.

Pepin. What generates language?

Albinus. The tongue.

Pepin. What is the tongue?

Albinus. The whip of the air.

Pepin. What is air?

Albinus. The guardian of life.

Pepin. What is life?

Albinus. The joy of the happy; the expectation of death.

Pepin. What is death?

Albinus. An inevitable event; an uncertain journey; tears for the living; the probation of wills; the stealer of men.

Pepin. What is man?

Albinus. The slave of death; a passing traveller; a stranger in his place.

Pepin. What is man like?

Albinus. An apple (i.e. because he hangs between heaven and earth).

It will be seen from these dialogues that while Alcuin, like all the mediæval scholars, knew something of the classic tongues, he had lost entirely the classic spirit, and indeed his knowledge was rather fanciful. Thus, in the true spirit of a monk, he derived coelebs (a bachelor) from cælum (heaven), and then gives the sapient explanation that a bachelor is one who is on the way to heaven. The parts of an hexameter line are called pedes because the metres walk on them. Littera is leg-entibus-iter, because the littera prepares the path for readers. Mālus (a mast) has the penult long, as against mālus (with a short penult) because a mālus homo does not deserve to have a long a! The vowels are the souls of words, and the consonants are the bodies. The soul moves itself and also the body,

while the body is immovable apart from the soul. Thus the consonants may be written by themselves, but they cannot be pronounced when separated from the vowels.

It is reported that Alcuin forbade any one to read the classic poets. So, while he did much to prepare for the great revival of learning, five centuries later, his immediate influence was rather harmful than otherwise. The cathedral schools taught what they could, but even their ablest scholars spent their time in constructing ingenious but foolish Latin trifles to show their cleverness. Thus they wrote for their own amusement what they called echoici versus, or lines of poetry which read the same both backward and forward, "serpentine verses" and reciproci versus.1 It is interesting to know how many of the classical writers were read at this time. Putting aside the Church fathers, we have mention by Alcuin of Pliny, Cicero, Vergil, Statius, Lucan, the grammarians, and Horace.² Where the classical writers were not locked up in bookcases, they were sometimes paraphrased, or else

¹ Examples of these are found even in the classical writers, as the following from Sidonius:—

Praecipiti modo quod decurrit tramite flumen Tempore consumptum iam cito deficiat.

(Epist. ix. 14.)

where the distich, if read backwards, word by word, gives a second distich.

² This list is taken from a poetical account by Alcuin of the Library at
York. One might add also from other sources Juvenal, a part of Livy,
Martial, Ovid, a part of Persius, Phaedrus, Propertius, Seneca (in part),
Silius Italicus, two plays of Terence, Tibullus, and Valerius Flaccus.

centones, or patchwork variations, were made from them. Thus, the conversation between Dido and Anna (Aeneid, iv.) is imitated:—

Anna, dux
Mea lux,
Iste quis sit ambigo,
Quis honor,
Quis color,
Voltu quis intelligo;
Ut reor,
Ut vereor,
Hunc nostra connubia
Poscere,
Id vere
Portendunt mea somnia.

If the learned had so little share of the classical spirit, it is not hard to understand how dense was the ignorance of the uneducated layman. The names and some faint echo of the exploits of the heroes of antiquity still floated through men's minds: Alexander the Great, as a remarkable conqueror; Hector of Troy, as a bold knight and lover; Helen, who set the town of Troy on fire; Vergil, as a powerful wizard who had once gone down into hell and told of what he saw there (Aen. vi.); Venus, as a woman of wonderful beauty, — these were all imperfect memories flitting about in legends, and fabliaux, and minstrels' songs, and all confused with tales of chivalry and magic, and forming part of innumerable stories about giants and dragons and dwarfs and demons, — specimens of which are faithfully

preserved for us in the Gesta Romanorum, and the Alexander Saga, and faintly indicated in the Faustus-legend and the Niebelungenlied.2 Even in Italy, where one might suppose that the great architectural works of the Romans would have kept their history in part alive, men had forgotten it entirely, and explained the Colosseum, the Palatium, the Pantheon, and the great triumphal arches as the work of demons and sorcerers, much as the German peasants of to-day speak of the Roman military works in Württemberg as Teufelsmauer. In Naples the carved figures of Roman heroes, men, and statesmen were supposed to be talismans. Many of these ancient structures were ascribed to Vergil, who was said to have known a spell so powerful as to compel devils to come from hell and build for him.3 The wandering reprobates, known as Goliardi, went about singing half-lyrical songs celebrating love and wine.

Nevertheless, the Carolingian Age left deep traces upon

¹A collection of curious anecdotes borrowed from all sources and written in Latin. Most of them have "morals" attached to them, and they are written in almost childish Latin. Some of them in later centuries were borrowed by Shakespeare, Chaucer, Gower, and Schiller for their plots or themes. See the English version edited by Hooper (London, 1894); and Howells, My Literary Passions, p. 14 (New York, 1895).

²See Engel's bibliography of the older Faust-literature (Aldenburg, 1885); and for the Niebelungenlied, Lichtenberger, Le Poème et la Légende des Niebelungen (Paris, 1891).

³ See Comparetti, Vergil in the Middle Ages, pt. ii., Eng. trans. (London and New York, 1895), and Leland, The Unpublished Legends of Vergil, (New York, 1900). On the Alexander-Saga, see Spiegel (Leipzig, 1851).

mediæval Europe. Alcuin¹ may be said to have originated the University of Paris; and his schools sent out teachers into the far North, so that even Ireland became an important home of learning, with schools and abbeys and monasteries of great repute. The oldest manuscript of Horace (the Codex Bernensis) was undoubtedly copied by an Irish monk in the eighth or ninth century, since on the margin are found words written in the Erse or Irish alphabet.

But the first impulse toward a revival of classical study under Charles the Great died out within the period of a few generations. The immediate reasons for this new decadence is partly to be found in a superstition which seized upon all Christendom in the tenth century. Men were obsessed with the belief that the world was to be destroyed in the year 1000. With the horror of this approaching dissolution before their eyes, — a horror that deepened as every day brought them nearer and nearer to the time of the expected cataclysm, —all learning fell into absolute neglect. It is difficult for us to conceive of the profound gloom that brooded over the peoples of Europe as the thousandth year approached. Men ceased to build

¹ See The Life of Alcuin by Lorenz, Eng. trans. (London, 1837); West, Alcuin and the Rise of Christian Schools (New York, 1892); Mullinger, The Schools of Charles the Great (London, 1877); Rashdall, The Universities of Europe during the Middle Ages (Oxford, 1895); Putnam, Books and their Makers during the Middle Ages, i. (New York, 1896); and Sandys, op. cit., i. 466, 497.

houses, to buy, or to sell. They for sook their domestic duties and betook themselves to the churches and the shrines of the saints; all worldly interests were swallowed up in the great dread that oppressed their souls. When the dreadful year arrived, it brought with it everything that could heighten and intensify the universal terror. A hideous plague broke out, the crops failed, the very seasons seemed to have been checked in their courses. Such imperfect accounts as have come down to us of that period give us, as it were, only glimpses of the fearful scenes that were enacted, - the wailing of women, the prayers of the priests, the lamentations of the diseased, many becoming mad with fright, half-naked fanatics stalking through the streets of cities and invoking damnation upon the wicked; while those lost souls whose own sins had driven them to despair of pardon threw off all restraint and with a sort of blasphemous defiance plunged into every form of lust and crime. When the year 1001 was ushered in, and the world remained still unvisited by the angel of death, a great reaction came. Many went back to their old life; but the Church, with a profound feeling of gratitude and relief, resolved to signalise the respite by a new activity. It is to this fresh enthusiasm that the second impulse toward a revival of study must be traced.

A whole century, however, elapsed before much progress had been made; but with the end of the eleventh century the great movement known as Scholasticism was fully

under way. Scholasticism was rather an intellectual than an æsthetic development. Its chief features are dialectic and not philological. The whole movement revolves about the philosophical question of Realism and Nominalism; but this discussion, while it sharpened men's wits and made them acute in reasoning, was, after all, little better than the labour that is done in a treadmill; for the schoolmen were not free to question anything fundamental. The Church prescribed for them a ready-made solution of every great philosophical problem, so that the dialecticians and casuists of the Middle Ages were only travelling in a circle, making no progress at all, but only vexing their souls and beating against the bars of an intellectual cage. This narrowness and lack of freedom became more and more oppressive as time went on, and more and more vexatious to the bolder spirits of the age.

The time from the eighth century to the fourteenth is divisible into two periods, viewed from the standpoint of classical learning. The first period begins at the end of the eighth century when Charles the Great established Monastic Schools, and made the first attempt, probably in the history of the world, to provide for a universal gratuitous primary education, and for Higher Schools. This period is a short one, inasmuch as the educational establishments of Charles died out within a few generations to make way for a new barbarism. The second period begins with a second restoration of learning under the guidance of

Scholasticism — a period which saw the Founding of the Great Universities. This second revival of learning was not, however, permanent, and the new love of study again decayed and was followed by the Renaissance, that final impulse toward liberal culture which forms the beginning of all modern educational history. These three revivals of learning, which were really revivals of classical study, were each stronger than its predecessor, and each prepared the way to some extent for the next. The first, under Charlemagne and Alcuin, though it lasted but a short time, left a body of men devoted to teaching, and gave some slight degree of continuity down to the founding of the universities. as Professor West observes, "so sheltering studies in various monasteries and cathedrals that some of the greater schools, thus kept alive, afterwards became natural receptacles for the new university life of the next age."

The first of these periods just mentioned was marked by a more systematic study of the Latin language. The importance of grammar began now to be recognised as the only safeguard against the absolute corruption of that tongue. One of the great French monastic schools took for its motto the sentence, *In omni doctrina grammatica praecedit*. Its study was made the basis and starting-point of all secular learning, and the minuteness with which it was pursued proved an admirable corrective to the slovenly carelessness in the use of Latin which had marked the ecclesiastical writings of the preceding centuries.

In the twelfth century three great schools survived of the numerous establishments founded by Charles the Great, and are distinguished for their influence in the preservation of classical learning. These were at Laon, at Paris, and at Chartres. In them a number of famous teachers ushered in the scholastic period and did much to keep alive the forms at least of pure Latinity. Of these three schools, the School of Chartres is the most remarkable because its interest was less theological and dialectical than literary, so much so that Poole justly says of it that its character was that of "a premature humanism." Associated with it are the names of Fulbert, whose pupils styled him "Socrates," and who died in 1029; of St. Bernard (1091-1153); and of Abélard (1079-1142), who boldly appealed to reason as against authority and thus foreshadowed freedom of speech and of research, which ultimately became the watchword of the nascent universities.2

In this school Bernard of Chartres composed hexameters on the model of Lucretius, wrote a commentary on the first six books of the *Aeneid*, and drilled his pupils

¹ Not the canon associated with the story of Abélard and Héloise. The great Fulbert was bishop of Chartres.

² See the biography of St. Bernard by Sparrow-Simpson (London, 1895); McCabe, *Peter Abélard* (New York, 1901); and Compayré, *Abélard and the Origin and Early History of Universities* (New York, 1893). St. Bernard, the great controversialist and mystic, is usually called Bernard of Clairvaux. Bernard the writer of beautiful hymns is known as Bernard of Cluny. The two men were, however, contemporaneous.

in the forms and rules of grammar as he understood them, introducing, at an early period of the course, the reading of the classical texts. Upon these he commented freely, besides treating them grammatically, pointing out the difference between the prose and the poetic style, and developing his system in a way that suggests the enlightened methods of a later age. Everyday exercises in prose and verse composition were required, and an insistence upon good models marked his teaching. One of his maxims, which has been quoted by John of Salisbury, is significant of the originality of his mind: "Among the virtues of the grammarian this is one, to be ignorant of some things."

These schools, as has been already said, formed centres about which ultimately rose the earliest Universities. Any cathedral school which boasted of the presence of a famous teacher drew to it a crowd of students, such an institution being called at first studium generale. These finally received a sort of incorporation by papal bulls and royal charters, with the power of perpetuating themselves by endowing their graduates with the right of teaching everywhere. This license to teach was the origin of the academic degree, and as soon as the *studium generale* had become a corporation it received the name of Universitas. Perhaps the oldest university was that of Bologna, which was founded in 1093, while Paris had a separately organised teaching body as early as 1169. Oxford became a university at about the same time; Cambridge, perhaps a little

earlier. The oldest German university is that of Prague, whose foundation dates from 1347. During the whole period of scholasticism which practically ends in the thirteenth century, while the Latin language was greatly used as a medium of communication and while its general forms were studied, it cannot be said that the classics were either read or appreciated outside of a few centres like that of Chartres. The teaching of the age was as narrow as its thought. Latin was studied only as a vehicle for scholastic disputation. It was spoken fluently by all scholars, but the classics were very little read; while the vocabulary of the language was filled with a swarm of new words and expressions partly theological and philosophical, and partly legal and political.1 The only persons who kept alive the older classical tradition were a few Italians who left Italy and established themselves in various parts of Western Europe. Among these were Anselm, who became Archbishop of Canterbury in the year 1003, and whose predecessor Lanfranc, together with men who, like John of Salisbury and a few of the French scholars, still knew something of the Latin of ancient Italy.

That so many manuscripts have survived to us dating from the eleventh and twelfth centuries, is due to no widespread love of classical learning, but rather to the fact that

¹ Cf. such words as nominalismus, materialismus, realismus, quidditas, haeceitas, and see Du Cange's Glossarium ad Scriptores Mediae et Infinae Latinitatis (last ed., 1884 foll.), passim.

in the monasteries copying was imposed upon the monks by way of penance. There was also a certain pride in possessing books, irrespective of any desire to read them. This pride was wholly the pride of the collector and not at all the pride of the scholar; nevertheless, to it is largely due the preservation of such manuscripts as we now possess. Among these storehouses in which were hoarded the treasures of classic literature, are especially to be noted the libraries of Monte Cassino, Naples, Bologna, Milan, and Bobbio in Italy; Fleury, Tours, Cluny, Montpellier, Chartres, Grenoble, Lille, Liège, Paris, Marseilles, and Caen in France; Augsburg, Freystadt, Strasburg, Leipzig, Würzburg, Mainz, Königsberg, Zweibrücken, in Germany; Leyden, Utrecht, and Dordrecht in Holland; St. Gallen in Switzerland; Copenhagen in Denmark; Stockholm in Sweden; Seville and Saragossa in Spain; and Oxford, Cambridge, Salisbury, and York in England. So true was the remark ascribed to Geoffrey of Sainte-Barbe-en-Auge: Claustrum sine armario (est) quasi castrum sine armamentario. It may interest the reader to see which are the oldest classical codices now extant:

¹ See Clark, Libraries in the Mediæval and Renaissance Period (Cambridge, 1894); Dugdale, Monasticum Anglicanum, 8 vols. (London, 1849); Wattenbach, Das Schriftwesen im Mittelalter (Leipzig, 1875); Deschamps, Dictionnaire de Géographie à l'Usage du Libraire (Paris, 1870); Wehle, Das Buch (Leipzig, 1879); and Putnam, op. cit. (New York, 1896–97).

A LIST OF SOME OF THE OLDEST CLASSICAL MANUSCRIPTS 1

I. Greek.

- a. Fragments of Euripides' Antiope and Plato's Phædo, 250 B.C. (Flinders Petrie Papyri, ed. Mahaffy, Dublin Academy, 1890.) The oldest specimens of a classical text known.
- b. A few lines of the XI. Iliad (ante-Aristarchean and non-Zenodotean), 240 B.C.
- c. Louvre Fragmenta of Euripides, second century B.C.
- d. Alcman, second to first century, B.C. (Paris).
- e. Iliad fragmenta (Banks, Harris), second century B.C.
- f. Papyri from Herculaneum, 79 A.D. (Epicurus, Philodemus).
- g. Aristotle.
- h. Herodas, Bacchylides. First to second century A.D.
- i. Menander (discovered in Egypt, 1905).
- k. Hyperides, 150 A.D. (London, Paris).
- Berlin fragments of the Melanippe of Euripides, third to fourth century.
- m. Papyrus fragments of Isocrates, fourth century (Marseilles).
- n. Codex Ambrosianus of the *Iliad* (Milan).
- o. Codex Vaticanus of Dio Cassius.
- p. Euripides' Phaëton, and Menander, Fragments.
- q. Fragmenta of Aristoph., Birds (Paris).

sixth

century.

II. Latin.

- a. Fragments of the Younger Seneca, first century (Herculaneum).
- b. Manuscript of Vergil, fourth to fifth century (chiefly Florence, Vatican).
- c. Fragmenta of Sallust's *Historiae*, third to fourth century (Orleans).
- d. Codex Bembinus of Terence, fourth to fifth century (Vatican).
- e. Codex Puteaneus of Livy, sixth to seventh century (Paris).
- ¹ Many of the dates in this list are conjectural, though agreed upon by scholars.

Palimpsest.

Juvenal and Persius, fragmenta in codice Vaticano, third to fourth century.

Codex Veronensis and Codex Vaticanus of Livy.

Lucan (Vienna, Naples, Rome), fourth century.

Cicero's De Republica, fourth to fifth century (Vatican).

Cicero in Verrem, fragmenta in Codice Vaticano, fifth century. Gaius, fifth century (Verona).

Platus (Codex Ambrosianus), fifth to sixth century (Milan).

Gellius and Seneca, fragmenta, fifth to sixth century (Vatican).

Fronto, fragmenta, fourth to sixth century (Vatican, Milan).

Livy, fragmenta (Vienna), fifth century.

It has been said that most of the codices preserved in these and other libraries were, for the most part, Latin and not Greek. By the eighth century, Greek, even as a tradition, had faded from the memory of Western Europe. Hellenic literature was little more known at that time than was Sanskrit down to the end of the eighteenth century. The names of Greek poets, philosophers, and statesmen were familiar only from the mention of them in Latin authors. Their actual personality, their time and country, and their places in history, were all a blank. Thus we find Smaragdus, a mediæval grammarian, so ignorant of the meanings of Greek words as to think that Eunuchus Comædia and Orestes Tragædia were the names of authors.

¹ Almost the only exception to this general ignorance of Greek is to be found in Ireland, whither Greek was probably brought from Gaul in the fifth century. The Irish schools were admirably conducted, and for a time the country was unmolested by the dwellers upon the Continent. While in Gaul and Germany and Italy there was continual strife and

Even when a little Greek had filtered its way into the knowledge of the mediævals they used it to vitiate and render barbarous the Latin which they wrote. Thus, the grammarian, Vergilius Maro, in the seventh century (whose preceptor wrote a work in which he discusses twelve kinds of Latin), coined new words on the analogy of the Greek. For example, scribere was supplanted by charaxare, while rex became thors (from $\theta p \dot{\phi} v \sigma s$), so that the mixture of Greek with Latin and the garbling of Latin forms to resemble Greek, resulted in an argot which is difficult to understand and which might well have justified the theory that there were twelve kinds of Latin, or, indeed, as many kinds of Latin as there were monks who knew a little Greek. There remains a composition by an Irish monk 1 which contains the sentence: 'Pantes' solitum elaborant agrestes 'orgium,' two out of the five words being Greek. These are only a few of the quaint things that were conceived by the mediæval grammarians, who made even a deeper darkness out of a glimpse of daylight. Thus we hear of long discussions on what was the vocative of ego, and of furious debaters rushing at one another with drawn swords because they could not agree as to inchoative verbs.2

a deepening of intellectual darkness, Irish scholars preserved the older learning and carried it to Bobbio and Pavia and St. Gallen. See Cramer, De Gracis Medii Ævi Studiis, i. 24 (London, 1849); Hyde, A Literary History of Ireland (Dublin, 1899); Newell, St. Patrick, his Life and Teachings (London, 1890); and Bury, Life of St. Patrick (Cambridge, 1905).

¹ Hisperica Famina, edited by Stowasser (1887).

² See Sandys, op. cit. i. p. 450, with the references there given.

Another thing that interested the mediæval scholars, as it had the Romans and even the Aristotelian Greeks, was the so-called Liberal Arts (artes liberales). Aristotle 1 made a distinct division between the liberal and the practical or technical arts. Varro and Cicero carried over the distinction to Roman culture, and Varro set forth nine subjects which made up the training of the Roman gentleman (liber homo). These nine were grammar, logic, rhetoric, geometry, arithmetic, astrology, music, medicine, and architecture.2 The later Romans, under Alexandrian influence, sought to lessen the number of liberal arts, and it is probable that they dropped medicine and architecture, though we have no direct proof of this. About the beginning of the Middle Ages, the Western Church, which had at first discouraged liberal studies on the ground that they were pagan, gradually came to cultivate them because they ministered to the higher spiritual truth. In this the Church was, curiously enough, going back to Aristotle, and even to Solon, who taught that μουσική or liberal culture is the training of the soul. St. Augustine (A.D. 354-430) altered the number of the liberal arts, so that his category contained only seven; and in this he was followed by the famous grammarian, Martianus Capella, a native of Africa, but a teacher at Rome, where he wrote, somewhat earlier than A.D. 439, a sort of educational allegory called De Nuptiis Philologiæ et Mercurii.

¹ Politics, viii. 1.

² Ritschl, Opusa. iii. 371.

This work is as important in the history of prose fiction as it is in the history of education; for its author dragged fiction into the service of grammar and tried to sugar-coat the pill of philology with myth and story. Martianus strikes out medicine and architecture on the ground that they are utilitarian studies.1 In Boëthius we find a separation of the liberal arts into two groups: first arithmetic, geometry, music, and astronomy, which form what was afterwards called the Quadrivium; while grammar, rhetoric, and logic form a trio which was soon known as the Trivium. Cassiodorus wrote a work upon the liberal arts, fixing the number at seven and even asserting that this number had a mystical meaning, since he quoted the text: "Wisdom hath builded her house; she hath hewn out her seven pillars." 2 This classification and this mystical interpretation of the number seven continue³ down through the writings of Isidorus, and was especially favoured by Alcuin⁵ and by Alcuin's pupil, Rabanus Maurus.⁶ This famous teacher (whose name is also written Hrabanus) was born at Mainz, of which city he was later made Archbishop. Studying under Alcuin, he compiled

¹ Martianus (ed. by Eyssenhardt, pp. 332 and 336).

² Prov. ix. 1.

³ Seven was a mystic number, not only among the Jews, but among all the great nations of antiquity. See an interesting chapter on the subject in Hadley, *Essays* (New York, 1873).

⁴ Supra, p. 190.

⁵ Supra, pp. 220-223.

⁶ His collected works are to be found in Migne's *Patrologia Latina*, vols. cvii–cxii. Cf. the monographs by Köhler (1870) and Richter (1882).

an abridgment of the Latin grammar of Priscianus which was much used throughout the Middle Ages. He is a connecting link in the development of classical study, as are his own pupils Rudolphus and Trithemius, who wrote biographies of their master which can be found in Migne's *Patrologia*.

Toward the end of the Middle Ages, there appears the remarkable figure of Roger Bacon; an Englishman born at Ilchester, educated at Oxford and Paris, and finally enrolled in the Franciscan Order. In his writings one can find that clearness of vision and keenness of criticism which were inimical to scholastic teaching. Bacon reaches out and figuratively clasps hands with men of modern times. His chief works are the Opus Maius, the Opus Minus, and the Opus Tertium (fragmentary). He also wrote a compendium on philosophy and another on theology. His originality gave great force to his learning, which was beyond that of any contemporary. He thought much, and he set down what he thought in a vigorous style and with a certain audacity which was rare among his fellows. So far in advance was he of others in the sphere of physics, that in his own time he was regarded as a sort of wizard or necromancer. It is likely that he had a knowledge of gunpowder and that he had experimented with the steam-engine as well as with a number of chemical compounds. Taking up his doctrines

¹ c. 1214-1294.

briefly, we may note that he criticised the Fathers for spending too little time in studying the ancient languages, and thus by neglect of them failing to understand the wisdom of the ancients. Furthermore, he declared that no perfect knowledge of the Scriptures can be had without knowing Hebrew and Greek, or that philosophy can be thoroughly pursued without studying Arabic.¹ All current translations are inaccurate, because the translators are not familiar with foreign words and leave many of them standing in the text; whereas Bacon says very acutely, that a translator ought to be familiar, not only with the language that he is translating and also his own language, but likewise with the subject to which the text relates. These are golden words, and they deserve the serious attention of modern publishers.

Bacon says that there are not five men in the Western world who are acquainted with Hebrew, Greek, and Arabic grammar. He shrewdly notes the difference between having a purely colloquial knowledge of any language and a knowledge which is scientific, which goes down to the very foundations, and which is therefore the knowledge of a philosophical linguist. Bacon, consequently, insists upon grammar, grammar, and still more grammar; and in this he is the forerunner of a philological school of modern times. He criticises even the errors of translation to be

¹ Referring to the Arabic translations of Aristotle of which the originals were practically unavailable to the Western world.

found in the Vulgate, and he hits hard those criticasters who have ventured to change the text. He says: "Every one has the impertinence to alter whatever he does not understand — a thing which he would not do in the case of classical poets." Here, Bacon drops a hint or two for the criticism of the texts of the Scriptures, — hints that were to be fruitful in the time of Valla and Erasmus.

Bacon was by no means one who merely criticises the work of others. He showed his interest in grammatical study by writing a Greek grammar, a manuscript of which, now in the library at Corpus Christi College, Oxford, has the Greek characters beautifully written and contains a short Greek accidence ending with a paradigm of the verb τύπτω.² A Greek lexicon has also been ascribed to Bacon. Nevertheless there was little Greek known to the scholars of that time, and at Oxford so much of Aristotle as was read was read in a Latin translation. It is worthy of remembrance that another Franciscan, the famous traveller, Raimundus Lullius, tried to persuade, first the Pope and then the University of Paris, to establish a school of oriental languages (Greek, Arabic, and the Tartar

¹ It is worth noting that an Oxford scholar of this time spent forty years in correcting and explaining the Vulgate. Cf. Martin, La Vulgate Latine au xiii s. d'après Roger Bacon (Paris, 1888); and Gasquet in the Dublin Review for January, 1808.

² Dr. Sandys observes (op. cit. i. p. 595) that "Bacon's own knowledge of Greek was mainly derived from the Greeks of his time, and it is their pronunciation that he invariably adopts."

dialects), thus anticipating the great oriental schools which thrive to-day at Paris and Berlin. Bacon's opuscula, gathered from the fragments of his minor work, are very interesting as showing his unusual mental activity. had a sort of glossary of Latin words derived from the Greek. He corrects a number of common errors in spelling, quantity, and etymology. He tells some anecdotes, as, for instance, that he himself has seen the Greek text of the fifty books of Aristotle's Natural History, mentioned by Pliny (viii. p. 17), and altogether takes us back to the many-sided curiosity of Aulus Gellius.² Altogether he is very fairly described by Hallam in a single sentence: "The mind of Roger Bacon was strangely compounded of almost prophetic gleams of the future course of science and the best principles of the inductive philosophy, with a more than usual credulity in the superstitions of his own time." 3

Mediævalism is something very difficult to understand, and many views are taken of it. Its spirit, when properly apprehended, was certainly not a spirit of desolation and decay. It sprang out of the ruins of antique greatness

¹ Rashdall, op. cit. ii. p. 96.

² See *supra*, p. 188.

³ There is an edition of Bacon's works edited by Brewer (London, 1859). A very excellent and comprehensive study of Bacon is that by Charles (Paris, 1861); and a later monograph by Parrot, Roger Bacon, sa Personne, son Genie, ses Œuvres et ses Contemporains (Paris, 1894). His Greek grammar was published, with notes and an introduction, by the University of Cambridge (Cambridge, 1892).

from which it drew much of its own knowledge, though often without any consciousness of its value. The Middle Ages appear to some as having been wholly a time of gloom when intellectual pursuits were discouraged, partly through lack of knowledge, and partly by the discouragement which came from an almost savage environment, pierced only here and there by rays of light and glints of colour. Yet in reality the true Middle Ages were very different from this description. There was a gradual process of assimilation, by which the highest thought of antiquity was to be transformed into something different and new. So we have the blending of the pagan past and the Christian present, combining what was beautiful in the antique world with what was spiritual in the Christian teaching. As we look at Mediævalism it often shocks us, since so much raw brutality was everywhere in contact with that which was in the end to master it. We seem at first to be standing on the borders of a dark and almost fearful waste, from within which we can hear the rending sound of continuous devastation. Yet when we give our patient study to it, we grow conscious that the process is not one of destruction, but rather of germination. Instead of a chilling cold, there is something warm and stimulating, that is always noticeable.

Thus its Art may have been rude, yet the originality of it has appealed most strongly to artists of modern times, while the grandeur of its Gothic architecture attains the height of the sublime. Even its Philosophy, as wrought out by the scholastics, has been revived and has flourished for two centuries, not merely within the great schools of the Catholic Church, but among men of every mode of thought, from Kant to Leo XIII.¹ As to the political side — the clash of principalities and powers and the almost incessant strife of kings and popes and mercantile communities, — Professor J. W. Burgess has admirably written:—

"Men have been wont to call the Middle Ages, 'Dark Ages.' On the contrary, they are full of light. In them the great questions of the relationship of individual right to political right, of local government to central government, and of ecclesiastical government to secular government, were raised and drawn into conscious consideration. Had the European empire of Charlemagne been perpetuated, Europe might have become a second China, but would never have been what it is — viz., the source of the civilization of the modern world. The unceasing conflicts of the Middle Ages between private right and public law, local government and central government, state authority and Church authority, were necessary to bring men out from under the monotony of slavish subjection to the artificial, external Church-state system of the Carlovingian empire, and develop them by the antagonism of thought and will into the power of producing systems more reflected and more free."

In Letters and Learning, we owe a great debt to the Middle Ages. For a time, the fanaticism of the Early Church destroyed much; but from the eighth century a

¹ See Picavet's remarkable monograph entitled Esquisse d'une Histoire Générale et Comparée des Civilisations Mediévales (Paris, 1905); and Perrier, The Revival of Scholastic Philosophy (New York, 1909). See also Allbutt, Science and Mediæval Thought, pp. 72, 78 foll. (London, 1895).

great deal was done to preserve and transmit the classical tradition, although by no means in the classical spirit. The use of Latin as a lingua franca, even in a corrupted form, made of it a thread that pierced the mazes of the mediæval labyrinth. One recalls the names of the great hymn writers, of the great teachers, from Alcuin and his immediate pupils, such as Rabanus Maurus, who lectured at Fulda, Servatus Lupus, Walafrid, who was in literature the precursor of Dante, 1 John of Salisbury, who was a mighty figure in English classical scholarship, Joseph of Exeter, Albertus Magnus,² Thomas Aquinas, his favourite pupil, and finally Roger Bacon himself, who stands, as it were, not far from Dante in the first faint light of the coming Renaissance. As we have seen, many of the Latin classics were read in part and some of them in their entirety. Many that were not read were nevertheless copied in the monastic scriptoria. Of those ancients who were well known (in addition to the Fathers) are Terence, Horace (who was much admired by Alcuin), Ovid, to whom many spurious poems were ascribed, Lucan, who was supposed to be an authority on geography and astrology, Statius, Martial, Tuvenal, who with Persius was esteemed for his stern morality, Cicero, of course, with the younger Seneca, the Elder Pliny, Quintilian, Cornelius Nepos, Cæsar, Sallust, Livy, Suetonius, and the historical anecdotes of

¹ See Ker, The Dark Ages, p. 159 (New York, 1904).

² See d'Assailly, Albert le Grand (Paris, 1870).

of the "Christians before Christ."

Valerius Maximus. The fragment of Petronius De Bello Civili was fairly well known, and was used for reading in the schools. Of all the classics, Vergil held the foremost place largely because he was believed to have been one

As to the adjuncts of classical literature, there was the small grammar of Donatus 1 and many compilations of Priscian's great work, of which there exist to-day more than a thousand manuscripts. Sometimes bits of text were quoted in illustration of the rules of grammar, though this was unusual.² There were also produced a number of lexicons, or rather glossaries and vocabularies. The mediæval teachers used to dictate to their students wordlists which were carefully copied and then often abridged, corrected, and enlarged according as they passed from one possessor to another. One of these glossaries, compiled as early as the ninth century, has been edited with a commentary, while containing also the substance of twelve others. Something like a genuine lexicon was produced by one Papias, the Lombard scholar, about 1063, though it was in reality a sort of encyclopædia. The Low Latin word Dictionarium did not come into use for a long time.

¹ Supra, p. 184.

² See the monograph on grammar contained in I. Müller's *Handbuch*, v. i (Leipzig, 1902).

³ Göttingen, 1854. See also the elaborate description of mediæval glossaries in Löwe, *Prodromus Glossariorum Latinorum* (Leipzig, 1876). A collection of these glossaries was begun in 1876 by Goetz under the patronage of the Royal Literary Society of Saxony.

Papias called his own dictionary, Elementarium Doctrinæ Erudimentum. It circulated in manuscript until after the invention of printing, when it was issued at Venice in 1491. In the twelfth century an English monk, Osborn of Gloucester, made an attempt at an etymological dictionary, which he called Panorama. About the year 1200, Hugutio, Bishop of Ferrara, compiled a Liber Derivationum. Eighty-six years later, the two works last mentioned were used by Balbi of Genoa, who based on them his famous Catholicon, which was not only a manual of grammar, but also of rhetoric and criticism, with a rather extensive lexicon of ecclesiastical Latin. These were the best dictionaries known to the Middle Ages.¹

Thus far we have regarded the Middle Ages wholly in their relation to the history of Western civilization, from the downfall of the Western Empire to the beginning of the thirteenth century. It remains for us to consider here the Eastern or Byzantine Empire (also called New Rome), which had its seat at Constantinople (Byzantium) and which outlived the Western Empire by more than a thousand years. The Eastern Empire was practically established in A.D. 330, when Constantine made Byzantium the capital of the whole Roman world; but the actual breach between the East and West came in A.D. 395. In that year

¹ See the monograph on Lexicography in I. Müller's *Handbuch*, i. (Nördlingen, 1902); De Vit, Preface to the Lexicon of Forcellini (Prato, 1879); Mahn, *Darstellung der Lexicographie nach allen ihren Seiten* (Rudolstadt, 1817).

the Roman Empire was divided between the two sons of Theodosius. Arcadius took the Eastern half, with his capital at Constantinople, while Honorius received the Western half, with his capital at Rome. The long and tangled history of the Eastern Empire is the record of constant strife, sedition, folly, treachery, misgovernment, and murder. Thus it has been neglected until the last few years. Even Gibbon called it "a tedious and uniform tale of weakness and misery." Montesquieu sweepingly declared that "the history of the Greek Empire from Phocas on was merely a succession of revolts, schisms, and treacheries." Taine vividly condemned it as being "a gigantic mouldiness, lasting a thousand years."

It has been computed that of the 107 persons who ruled from 395 to 1453 (when Constantinople was stormed by the Turks), 20 were murdered, 18 were mutilated, 12 died in a monastery or a prison, 12 abdicated, 3 starved to death, 8 died in warfare — in all, 73 out of 107 met with violence or disgrace. Perhaps the best excuse for the existence of the Byzantine Empire is found in the fact that it formed for centuries a barrier between Asia and Western Europe, so that the latter had time to attain cohesion and a sort of unity of purpose, to develop a new civilisation and the military power necessary to repel wild hordes, such as the Saracens whom Charles Martel shattered at Tours in the eighth century, or the Turks who were hurled back from Vienna in the sixteenth century.

If we look more carefully into the history of Byzantium in its later years, we shall find that while religious schisms, civil wars, and violence of every kind shook it to its centre, there are everywhere traces of the older Roman spirit, surviving and making themselves visible. Indeed, the history of Old Rome is very largely a history of civil war, and so we must not be surprised that New Rome showed many of the same characteristics. It differed from Old Rome in being far more oriental. Its rulers were despots; its people were, as has been said of the Parisians, "half tiger and half ape." In other words, princes and populace alike alternated between the most childish amusements and the most bloody strife.1 Yet, it had the Roman power of assimilation, and of recuperation after periods of exhausting warfare. Some of its emperors, such as Constantine Copronymus (741-773), were great soldiers and organised more effective armies than the world had yet seen. The boundaries of the Empire were extended, both in Asia and Europe. Again and again the administration was reformed and commerce stimulated. Against the Hungarians, the Turks, the Armenians, and the Bulgars, successful wars were waged.2 Byzantium itself was a

¹ For a diverting account of life in Byzantium, see Marrast, Esquisses Byzantines (Paris, 1874).

² See Gibbon, The Decline and Fall of the Roman Empire, edited by Bury (Cambridge, 1899); Bury, A History of the Later Roman Empire (London, 1890); and Oman, The Story of the Byzantine Empire (London and New York, 1892).

magnificent city. Rome on the Tiber was ransacked to make the new capital deserve the title of "Imperial." Statues and paintings and jewels gleamed and flashed in all its public buildings. Its architecture has been styled "the complete monumental expression of Greek Christendom." It was the Greek architectural genius which chose the Roman dome as its fundamental unit in place of the wooden roof, and then, by using lofty piers, was able to suspend the dome and use it with any kind of groundplan. Domes were even multiplied at will; and this (with semi-domes) is characteristic of the Byzantine architecture wherever it can be found, especially in the great masterpieces of St. Sophia and the Church of the Apostles in Constantinople, as well as in many churches in Russia, Northern Italy, and Asia Minor. In fact, the Byzantine types were Græco-Asiatic in their origin, and this is why they suggest at once an Orientalism which we can trace in almost everything which the Eastern Empire originated.

As for other forms of art, there are few remains of Byzantine Sculpture, partly because there existed, first, an oriental lack of skill in drawing the figure, and second, because many of the Greek Christians were iconoclastic in the literal sense. Fresco-painting, Mosaic, and Panelpainting were practised by the artists of Byzantium. Most of the frescoes and panels have now disappeared. It is only from the mosaics made prior to the twelfth century that modern archæologists can get any good idea of

the early Byzantine painting. We know, however, that it greatly influenced the Christian artists throughout the Middle Ages, and it was felt even in the later frescoes in the catacombs at Rome. Toward the middle of the eleventh century, the Italian States and the Norman Kingdom at the South imported Byzantine artists in mosaic who trained Italian pupils and thus spread the Byzantine influence throughout Italy. It is in the Minor Arts, however, which have to do with decoration, such as the illuminating of manuscripts with gorgeous colours, ivory carving, tapestry weaving, rug-making, and the carving of cameos, together with embossing, chasing, and enamelling the most exquisite bits of gold work, that the skill of the Byzantine artists was supreme.¹

Byzantine Literature has in itself (with one exception) 2 very little to interest any one save the historian. Scholars and priests of Byzantium wrote innumerable tracts and controversial treatises, which have mostly perished, as they deserved to do. The Byzantine Historians form a group of writers who busied themselves with the history of the Eastern Empire down to its destruction by the Turks, and there were some who kept on writing even after that. Five of them have considerable value. These are Zonaras, Nicetas, Nicephorus,

¹ See Texier and Pullan, Byzantine Architecture (London, 1894); Essenwein, Byzantinische Baukunst (Darmstadt, 1896); Bayet, L'Art Byzantin (Paris, 1892).

² See infra, pp. 254-257.

Chalcondylas, and Procopius. The first four of these give a continuous history of the Byzantine Empire from its beginning down to the year 1470. Procopius is noted as a collector of scandalous stories which he jotted down in his Anecdota, or "secret history." In it he gives his private notes relating to the court-life with which he was very intimate; and the book reminds one of some of the French memoirs which reveal to us the piquant sayings and doings of the French court under the old régime. This book of Procopius was not published until after his death. It is written in a fresh and interesting style, and in consequence has been read more than almost any other production of the Byzantine historians.¹ There are fifteen other writers of Byzantine history whose united works are published with a Latin translation in the Corpus Scriptorum Historiæ Byzantinæ.2

Really remarkable among the Byzantine writings is the codification of the Roman Law made by the Byzantine lawyer, Tribonianus, an Asiatic Greek, at the command of the Emperor Iustinianus. It was a collection of authori-

¹ For a separate edition of Procopius, including his orations, the reader is referred to Dindorf, 3 vols. (Bonn, 1838). There is an old and rare translation of Procopius into English by Holcroft (London, 1663). The most amusing or startling passages of Procopius were transferred by Gibbon to the footnotes of his *Decline and Fall*.

² In 36 vols., edited by Labbé (Paris, 1711; reprinted at Venice in 1733). A similar collection in 48 vols. was begun at Bonn in 1828, but is badly executed, although parts of it were done by such distinguished scholars as Niebuhr, Bekker, and the brothers Dindorf.

ties, and to it we owe the treasures of ancient jurisprudence which must otherwise have been lost. The whole has been known since the sixteenth century as the *Corpus Iuris Civilis*.¹

It will thus be seen that so much of the literature of the Eastern Empire as has been preserved was of a formal and not very artistic character. Doubtless the populace had its own ephemeral prose and verse, of which there are some fragments left, — for instance, in the so-called *politici versus* (στιχοί πολιτικοί) written in popular metres, and the cheap novels composed by Theodorus Prodromus of Constantinople. He was imitated by Nicetas Eugenianus, and there are also eleven books on the adventures of Hysmine and Hysminias, which are perhaps the original source of the world-famous story of Don Juan.²

To Byzantine Scholarship, Classical Philology owes an enduring debt. The learned men of Byzantium lacked originality, but they had the gift of patience to an extraordinary degree. Like the historians, they were tireless in collecting scraps and fragments, in making up excerpts and compilations, and in this way preserving the wealth of rich material for modern times. Almost all their material was derived at second hand, whether it was lexicographic,

¹ It is in four parts, known as (a) Codex Iustinianeus; (b) Pandectæ or Digesta; (c) Institutiones; (d) Novellæ, this last mostly written in Greek. Edited by Mommsen and others.

² See Waxman, The Don Juan Legend in Literature, in Journal of American Folk-Lore (April, Sept.), 1908.

historical, or etymological. Thus Photius (c. 820-c. 891) wrote many things, among them two volumes which are of great service to the student of the Greek language and literature. He was sent as an ambassador to Assyria and beguiled his stay there by making abstracts of 280 books, many of which are now lost. Sometimes he varied his abstracts by criticisms and comments so that the whole, which is called Myrobiblion 1 (Mupio $\beta i \beta \lambda lov$), gives us a synopsis of much ancient and valuable literature. Remarkable for its extent and for its preservation of early historians was the encyclopædia of history compiled by one of the emperors, Constantinus Porphyrogenetus (reigned from 915 to 959). This book was something like the Historian's History of recent times, since, while it was arranged according to the subject-matter, its text was that of the earlier authors who had treated these themes.

An extremely important work in the growth of Lexicography is the Lexicon of Suidas (c. 976). This is a remarkable monument to the erudition which is encyclopædic. The sources upon which Suidas drew are still only partly known; but his reading must have been monstrous in its scope and range, as his book is almost monstrous, rudis indigestaque moles. It is a grammar, lexicon, and geography all in one. The subjects are arranged in alphabetical order, but with little care or skill, and it is full

¹ See Krumbacher in Müller's *Handbuch*, ix. 1 (Nördlingen, 1897), pp. 1193 foll.; Hergenröther, *Photios*, 3 vols.

of serious mistakes which show that Suidas was not possessed of the critical spirit. Still, the work is extremely valuable because it contains so much information that can be found nowhere else.¹

Following Suidas came Ioannes Tzetzes, who was also a very voluminous writer, mainly of scholia; for besides his allegories of the Iliad and Odyssey in ten thousand verses (hence Chiliades), interpreting Homeric mythology in a rationalistic way, he prepared a commentary to the Iliad, the Pseudo-Homeric works, and has left scholia to Hesiod, to Aristophanes, to Oppian, and especially to Lycophron's Alexandra. Here he gives us the only clew that we have to that obscure and mystical poem.2 He also epitomised the rhetoric of Hermogenes. He was fond of writing the so-called versus politici.3 Eustathius, Archbishop of Thessalonica, wrote about 1175 a valuable commentary on the Homeric poems which is based upon sound Homeric scholia and other excellent sources, while we also have from his pen a fine preface to a commentary on Pindar. The body of this work itself has been lost.4 From the stand-

¹ The best edition is that of Bekker (Berlin, 1854), but see also the *Prolegomena* to Bernhardy's edition, pp. 25-95, and Krumbacher, op. cit. pp. 562-570.

² Supra, p. 101. Some think that this work was written by his brother, Isaac Tzetzes. See Hart, De Tzetzarum Nomine, Vita, Scriptis (1880).

³ Supra, p. 101. His works are edited separately by Bekker (Berlin, 1816), the *Chiliades* by Kiessling (Leipzig, 1826), and Lehrs (Leipzig, 1840). See Krumbacher, op. cit. pp. 526-536.

⁴ See Krumbacher, pp. 536-541. The preface to Pindar has been edited by Schneidewin (Göttingen, 1837).

point of pure literature, the most interesting Byzantine writer is Maximus Planudes (1260-1310). Though he wrote scholia and a treatise on syntax, it is more to the point that he translated into Greek a number of Latin authors such as Cæsar, a part of Cicero, the sayings (disticha) of Cato, the Metamorphoses of Ovid, and especially the Heroides of Ovid, basing his translation on a valuable manuscript which is now unknown. Most important of all is the Anthology which he compiled with much taste and which is the younger of the two great Greek Anthologies. This one is called Anthologia Planudea. It was really based on earlier anthologies, the first having been made by Meleager of Gadara about B.C. 60. To it Meleager gave the title 'Ανθολογία, or "The Garland." This original Anthology was made up of poems by Meleager himself and forty-six other poets, including Alcæus, Anacreon, Sappho, and Simonides. The poems were all of the first order and were epigrammatic in the Greek sense, — briefly embodying a single thought, either tender or humorous or pathetic, and all of them exquisitely polished, so that they glowed and glinted with light and colour. This work was immensely popular, and continual editions were made to it throughout the centuries, until in the tenth century A.D. one Cephalas edited the mass of poems and made practically a new compilation. Planudes did the same, though with far less literary taste. Nevertheless the Planudean Anthology was

the only one known in Western Europe until the seventeenth century. It is the basis of the famous translation by Grotius.¹ In 1606, Salmasius (Claude de Saumaise) found in the library at Heidelberg the older and finer collection of Cephalas. This, however, was not published for one hundred and seventy years, when it was included by Brunck in his Analecta; nor was it critically edited until there appeared the edition of F. Jacobs in 1803.² No skill and no modern language can fitly and artistically translate these wonderful poems. They are the embodiment of Greek genius, and they sweep the whole gamut of human feeling with a sureness of touch and an exquisite artistry that are utterly inimitable.

Another means by which Western civilisation was modified came from the Crusades, which indirectly brought Western Europe into contact with the Byzantines, and also with the Turks, Saracens, and Arabs. The First Crusade occupied the years 1096–1099. The Seventh or last Crusade began in 1270 and ended in 1272. It is impossible that hundreds of thousands of Europeans could have be-

¹ Infra, p. 349.

² In 13 vols.; revised in 1817. A recent edition is that in Didot's Bibliotheca (Paris, 1872), while a fine critical edition was begun by Stadtmüller in 1894. See Thackeray's Anthologia Graca with English notes (London, 1877) and Mackail, Select Epigrams (London, 1891). Stadtmüller has added to the Palatine collection a number of the most brilliant poems from ante-classical sources down through the Byzantine period, so that, in all, not less than three hundred poets are represented. The Heidelberg collection is called Anthologia Palatina.

come acquainted with the ways and customs and art and learning of older civilisations than their own without receiving impressions which they carried home with them. In fact, the Crusades are generally held to have checked the advance of the Muhammadans, to have enriched Europe by promoting trade and establishing new industries, by bringing into circulation great quantities of money which had hitherto been hoarded, and by making more important the free cities of Europe. Finally and most pervasive was the intellectual effect of contact with the higher culture of the Byzantines and Arabs. Those Europeans who had been fond of philosophy found in the sages of the East men who were their masters, and who could teach them even Greek philosophy far better than they could learn it in the schools and universities of their native lands. This led to a certain toleration, and often to a liberality of thought which verged on skepticism. Some Crusaders even became Muhammadans. As has been said, "The roots of the Renaissance are to be found in the civilization of the Crusades." 1

So much for Byzantine and oriental influence through-

¹ See Wilken, Geschichte der Kreuzzüge, 7 vols. (Leipzig, 1807–1832); Michaud, The History of the Crusades, Eng. trans. (London, 1881); Kugler, Geschichte der Kreuzzüge (Berlin, 1891); Von Sybel, Geschichte des ersten Kreuzzüges (Leipzig, 1900); Archer and Kingsford, The Crusades (New York, 1898); Röhricht, Geschichte des Königreichs Jerusalem (Berlin, 1898); and especially Prutz, Kulturschichte der Kreuzzüge (Berlin, 1898).

out the Middle Ages. It was for the most part represented by men of erudition rather than of taste, who turned their backs in large measure on the old learning in order to engage in theological controversy or political strife. But they at any rate preserved the manuscripts of the true Greeks, and they were to exercise a direct influence at a time when the mist of the Middle Ages was dispelled in Western Europe and when mankind awoke to what was a new heaven and a new earth.¹

¹ On the literature of the Byzantines, see Krumbacher, op. cit.; Wilamowitz, Euripides und Herakles, i. pp. 193-219; Gibbon, op. cit., and Hankius, De Byzantinarum Rerum Scriptoribus Græcis (Leipzig, 1677). Cf. also Sandys, op. cit. i. pp. 387-439; Mr. Frederic Harrison's Byzantine History in the Early Middle Ages, p. 36 (London, 1900). It is interesting, though inexplicable, that Dr. Gudeman in his Outlines of the History of Classical Philology should have devoted nearly five pages to the Byzantine scholars of the Middle Ages, while the scholarship of Western Europe for nearly a thousand years is put off with a mere bibliographic notice filling half a page.

VI

THE RENAISSANCE

THE Renaissance — the most remarkable intellectual movement that the world has ever seen - is too often regarded as being primarily nothing more than an intellectual reversion to the great models of classical antiquity, - as being almost exclusively literary, artistic, and archæ-Yet this is only a narrow and imperfect view. The Renaissance which began in Italy was rather a profound and far-reaching revolt against the narrowness and mental routine of mediævalism. It was the waking of humanity in Western Europe from a prolonged lethargy, to burst all the fetters that ages of tiresome tradition had forged for it, and to struggle up into the sunlight of intellectual freedom. It was a great declaration of independence, the effects of which were ultimately to be felt in every sphere of human activity. In philosophy it overthrew scholasticism. In religion it paved the way directly for the so-called Reformation. In art it inspired the masterpieces of Michelangelo, Rafaelle, and Da Vinci in Italy, and the great schools of painting that soon afterward sprang up in the Netherlands and Flanders. In architecture it restored the beautiful classic models.

politics it finally abolished feudalism by giving birth to the sentiment of nationality, and sowing the seed from which constitutional government was to spring. In science it made astronomy truly scientific through Copernicus and Galileo. It invented printing and, by the employment of the compass, was enabled to discover the New World and the Indian Ocean. It would be impossible to exaggerate the tremendous and far-reaching influence of this wonderful movement whose effects have permeated every department of intellectual effort and left enduring traces in every sphere of modern life.

The Renaissance began in the field of scholarship, and for our purposes we need consider its importance only from that particular point of view. One of the first significant signs of the coming change is to be seen in Dante, who not only broke away from mediæval tradition in using the vernacular Italian verse, while taking Vergil as his model, but who likewise wrote a number of treatises in the Latin language that were the foreshadowing of the new spirit. In one way, Dante does not belong to the history of the Renaissance. He is in many ways a pure mediæval in his sympathy with the world for which he wrote; yet in a large sense he is truly the herald of the coming dawn. "In him the modern mind first found its scope and recognised its freedom; first dared and did what placed it on a level with antiquity in art. Many

¹ 1265-1321.

ideas, moreover, destined to play an important part in the coming age received from him their germinal expression. It may thus be truly said that Dante initiated the movement of the modern intellect in its entirety, though he did not lead the Revival considered as a separate movement in this evolution." The Renaissance in its first period began in Italy (1250–1453), and was marked by a wide-spread revival of interest in classic literature and classical ideals. Its first sign was a passion for the largeness and the richness of the pagan world, and this we see in the vigour and magnificence of Dante's own verse, in striking contrast to the dull formalism of those who had before his time written for the mediævals.²

It is a popular error which ascribes the Renaissance to the influence of the Byzantine Greeks. Some wrongly say that after the capture of Constantinople by the Turks in 1453, many scholars and writers fled westward and imparted their learning and their knowledge of the Greek classics to the Western peoples, especially in Italy. But, as a matter of fact, the Renaissance began at least a century before the fall of Constantinople, as can easily be seen by considering the brilliant career, not merely of Dante, but of the true protagonist of this period, Francesco Petrarca, whom we shall mention a little later. We have

¹ Symonds, The Renaissance in Italy, p. 69.

² See Federn, Dante and His Time, Eng. trans. (New York, 1902); and Scartazzini, A Handbook to Dante, Eng. trans. (Boston, 1897).

also seen that Roger Bacon, who flourished in the thirteenth century, composed a Greek grammar and pronounced his Greek after the manner of the Byzantines. A few Greek teachers of eminence had been known in Europe, but they seem to have excited no great interest outside of a very small set. Nor was the mediæval mind necessarily cramped and its culture crude. One could hardly say that, after recalling such names as those of Gregory the Great, of Cassiodorus, Alcuin, Charlemagne, and the great scholars and teachers who were best known in France and England. The Renaissance means rather a new inspiration and a new desire. It was essentially secular and almost pagan in its irresponsibility, its love of life, and its thirst for mental freedom. The mediævals had been almost wholly under the guidance of the priesthood, and their chief concern had been with the mysteries of faith. Their philosophy was ingenious, but it was very narrow. It could split hairs most dextrously, but finally men grew weary of the splitting of hairs and shook themselves into a realisation of what a larger life must mean for them. So the Englishman, William of Ockham, expresses the new feeling in a new philosophy of Nominalism. Marsigilo of Padua teaches the importance of the individual and that the individual has a right to think and organise as seems best to him. Wiclif in England, and John Huss in Bohemia, and many other independent minds organised

¹ Boethius, Isidorus, Alcuin, Rabanus Maurus, Bacon, et al.

at their pleasure throughout Europe. They taught the importance of the individual Christian to Christianity and the right of individual interpretation of the Scriptures.

A brief survey of Francesco Petrarca's activities will give an understanding of what was actually done at the beginning of the true Renaissance. It was he who took the first positive steps in the revival of learning.1 Possessing the fire and the passion of a Catullus, he openly revolted against the dimness and bareness of mediævalism. He reverted with an almost fierce intensity to the pagan freedom and spontaneity of thought. He travelled widely and visited the learned men of France and Germany and Flanders. He saw a larger world than his predecessors knew, and he took a more comprehensive view of human life. His poetic instinct and exquisite taste rejected the dull writings of the scholastics with their barbarous and clumsy satires. For his own inspiration he went to Vergil, and in his studies he enlarged his Latin vocabulary from the Ciceronian and Augustan writers. Apart from his Italian verse, he composed an epic in Latin entitled Africa. Its subject was the Second Punic War, and it was received with an enthusiasm that can now scarcely be realised or understood. But it recalls to us the significant fact that one of the great motives which led to the Renaissance was a renewal in Italy of the national spirit, so long stifled both in politics and art. The petty republics and small

principalities had almost blotted out the memory of the time when the great Roman Empire had been mistress of the world and when Rome gave law to Spain and Gaul and Africa and Asia Minor. A recollection of this fact now thrilled through the minds of all Italians and inspired that sentiment for Italian unity which was destined to remain a vital thing down through the succeeding centuries until gradually the Kingdom of Sardinia gave it actuality when in 1870 the King of a United Italy burst through the walls of Rome and made that ancient city the splendid capital of a new and powerful State.

As to Petrarca's Latin epic on the Second Punic War, its verse is imperfect. The Latin poets of the Renaissance period were still obliged for a long time to guess at many of the quantities in the words which they employed, and they often guessed wrong; yet there are in this poem many splendid passages of which perhaps the most significant of all is one of nine lines in the ninth book, which is a spirited and striking prophecy of the Renaissance itself.

One more important fact remains to be mentioned. To Petrarca's mind, it began to be apparent that the classical texts known to his world formed but a small part of the great and splendid mass of literature that had once existed; and he appears to have set himself to the task of its recovery. Wherever he went in his travels, he searched for manuscripts of classic authors, and with some measure of

¹ ix. 273-282.

success. At Liège he discovered two new orations of Cicero and a part of Cicero's letters. At Verona he found a portion of the *Institutio* of Quintilian, — then practically unknown. More important in its way than all the rest as a philological discovery, he recognised and acknowledged the very close relation of Latin to Greek, — a wonderful achievement for the time, as strange, in fact, as the much later discovery of the relation of Sanskrit to both Greek and Latin. In his old age, Petrarca, like Cato, made an effort to master the Greek language. Unluckily there was no one in Florence at that time who was capable of teaching him, and he died without learning enough to read a copy of Homer which had been sent him from Constantinople.¹

Petrarca was the first true son of the Renaissance, in that his love for classical antiquity was not in the least degree overlaid by mediævalism, as was that of Dante. Despising all that had been done in the preceding seven hundred years, he struggled passionately to return to the spirit and life of the classical age. Before his death he had attained to a Latin style of remarkable purity, and in his Epistolæ, his De Viris Illustribus, and his dialogues he struck the note of classicism so clearly and so splendidly as to waken the dormant genius of Italy once more to

¹ Petrarca urged his friend and disciple Boccaccio to render this copy of Homer into Latin, and the task was very imperfectly performed with the aid of a Calabrian Greek, one Leonzio Pilato.

life.¹ Petrarca's gifted secretary, Giovanni da Ravenna (or Giovanni Malpaghini), an accomplished Latinist, was the most noted missionary of the new movement. Travelling from city to city all over Italy, he gathered about him a host of pupils to whom he taught the Latin, not of the monks and schoolmen, but of Cicero and Cæsar, communicating to them the new impulse, and stirring them with a new enthusiasm that had been felt both by himself and by his inspired master.

Giovanni Boccaccio,² who is best known to moderns by his *Decameron*, was an enthusiastic son of the Renaissance. His mother was French, but he was soon taken to Italy, where he flung himself into the gay life and natural beauty of the city of Naples, which was then, under King Robert, a centre of culture and learning. At the same time he became interested in classical study and had spent much time in copying manuscripts of Terence and Apuleius. It is likely that the latter author, whose book is professedly a collection of Milesian tales, gave Boccaccio the first suggestion for his *Decameron*, which is, in arrangement and manner, a collection of Milesians, that is to say, of short, witty stories as we know them now. But from

¹ There is a critical edition of the Africa by Corradini with an Italian translation (Oneglia, 1874). On Petrarca himself, see Mézières, Pétrarque (Paris, 1867); Geiger, Petrarca (Leipzig, 1874); Robinson and Rolfe, Petrarch (New York, 1898), and de Nolhac, Pétrarque et l'Humanisme, 2d ed. (Paris, 1907).

^{2 1313-1375.}

the standpoint of a classicist, Boccaccio is most important because of the fact that he attained to an excellent Latin style and wrote a number of treatises in Latin on various subjects, quite after the manner (let us say) of Varro or Suetonius. His disciples and those of Giovanni Malpaghini in their turn preached the gospel of classical culture at Venice, Mantua, Rome, and other Italian cities. Leonardo Bruni² made excellent translations of Aristotle, Demosthenes, and Plutarch; while Barbaro, Strozzi, and others shared in the enthusiastic labours. One of them, Colutius Salutati (Coluccio di Salutato), chancellor to the city of Florence in 1375, first used in the public documents of his office the sonorous Latin of Cicero, and thus forced upon popes and princes the necessity of securing for themselves scribes and secretaries who were masters of the classic style. The interest which pertained to everything which had to do with classical antiquity led Ciriaco de' Pizzicolli (Cyriacus of Ancona) to feel a strong enthusiasm for archæological rather than literary remains. ransacked every part of Italy and the Greek islands, collecting, besides manuscripts, bits of sculpture, gems, medals, and coins, and taking note of such inscriptions as seemed to him significant. When asked what was his object in these endless journeyings, he replied, "I go to

¹ See Körting, *Boccaccio's Leben und Werke*, pp. 742 foll. (Leipzig, 1880); Symonds, op. cit. pp. 87-97, 133; Cochin, *Boccaccio*, etc. (Paris, 1890).

² 1360-1444.

awake the dead "; and this reply has been regarded as the key-note of the early Renaissance.1

The recognition of the value of Greek which had come to Petrarca in his later years now became a part of every scholar's training. Giacomo da Sciaparia visited Constantinople in 1375, the year of Petrarca's death, for the purpose of learning Greek from those who spoke it. Salutato and Strozzi founded a chair of Greek at the University of Florence. In 1306 Manuel Chrysoloras, a learned Byzantine, came from the East to Italy; and while teaching Greek at Florence, established schools for the study of that language at Padua, Milan, Venice, and Rome. Cosimo de' Medici, then head of the Florentine Republic, founded a special academy for the study of Plato. The rich citizens of Florence vied with one another in their munificence and enthusiasm for the furthering of classical learning. Niccolò de' Niccoli, Pietro di Pazzi, Manetti, and Palla Strozzi are but a few of many famous names. The first gave his entire fortune to the collection and reproduction of ancient manuscripts. Di Pazzi kept a teacher of Greek and Latin always in his house, and committed to memory the whole of the *Æneid* and long chapters of Livy. Manetti devoted his life to the furtherance of what has been called Humanism in opposition to

¹ Corpus Inscriptionum Latinarum, ii. pp. xxii. 129 foll.; Hübner, Römische Epigraphik in Müller's Handbuch, i; Symonds, op. cit. pp. 155 foll. and infra, p. 270.

Mediævalism.¹ He strove also to harmonise the teachings of Christianity with those of paganism. Strozzi employed all the facilities which his great commercial interests in other countries gave him for the discovery and purchase of manuscripts.

It is perfectly clear from all this, that it was not the downfall of Constantinople and the dispersion of Greek scholars that brought about the Renaissance, since the thirst for learning, the reversion to the classical spirit, antedated the end of the Byzantine Empire by nearly eighty years:

"Circumstances favoured a rapid spread of the new culture. The Italian cities, grown rich under democracy, but having tired somewhat of its responsibilities, had been passing into the control of that extraordinary series of despotic rulers who united with a brutal unscrupulousness of character a taste for the best in literature and art without a parallel. It was one of the chief aims to power for a new-made tyrant like Cosimo de' Medici that he provided the means of existence for talent of every sort. Even the bloody ruffians who, one after another, held power in Milan, made places for scholars and artists, maintained libraries, and encouraged learned research. The ancient universities of Bologna, Padua, and Salerno were reinvigorated by the healthful breath of the new learning and stimulated by the rivalry of the new schools founded by the younger republics. The Papacy, with a free hand after the Council of Basel (1431-1440), passed into the control of a series of men like Nicholas V., Pius II., and Leo X., in whom the interest in learning and art was an absorbing passion. In fact, learning, under the Italian humanistic impulse, may be said to have taken on the form of a fine art and thus to have concealed much of its serious import. Under all these favouring conditions it is not strange that

a certain flippancy of character came to be associated with the cleverness of the fifteenth-century scholars. The lightness of Boccaccio had seemed the natural expression of exuberant joy in the natural things of human life. A century later, this sincerity had largely given way to an over-refinement that knew no limits. Everything was permissible in the name of æsthetic experiment. Without in any formal way renouncing their allegiance to Christianity, many became more really interested in philosophy than in doctrine, and increasingly lax in following the ordinary forms of devotion."

Here, then, is to be seen what is meant by Humanism as opposed to Mediævalism. Humanism of course suggests humanitas, which to the Roman mind meant fine breeding combined with geniality, careful cultivation, and a certain urbanitas—in other words, the characteristics which to-day mark the one whom we would describe as a gentleman and a scholar. The key-note of Humanism is a toleration of individual tastes and an objection to every form of dogmatism. The mediævals were dogmatic to a degree. The men of the Renaissance imposed no check upon the æsthetic tastes of others, though they were all bound together by a common love of what was fine and gracious and beautiful.²

Returning to the relations between Byzantium and Italy, we can readily see in the first place that the Renais-

¹ See infra, p. 272.

² Voigt, Die Wiederbelebung des klassischen Alterthums oder das erste Jahrhundert des Humanismus, 3d ed. (Berlin, 1893); Burckhardt, The Culture of the Renaissance in Italy, Eng. trans. (London, 1898); and Gasquet, The Eve of the Reformation (London, 1905); Emerton, op. cit.

sance antedated the sack of Constantinople by the Turks (1453). It is, indeed, of the utmost importance to classical literature that the general interest in the Recovery of Greek manuscripts began while Constantinople was still an independent Grecian city. Had the Renaissance been postponed, many of the literary treasures brought to Italy in the early part of the fifteenth century to supply the demand of Italian scholars must have remained in Greece to be destroyed in the pillage of Byzantium, where it is traditionally said that at least 120,000 books were taken and burned by the fanatical Turks. As it was, from the year 1400 to 1450, there was an increasingly brisk importation of Greek texts into Italy, and an even greater demand for translations of them. Thus, Nicholas V., who, as a monk, had run deeply into debt for manuscripts, became, when Pope, a munificent collector and patron. It was his purpose to have all the Greek classics rendered into idiomatic and lucid Latin. He maintained hundreds of copyists in his service, and agents in foreign countries were employed by him wholly for procuring codices. It was he who gave to Perotti five hundred ducats (\$1200) for translating Polybius into Italian, and to Guarino a thousand gold floring for a like version of Polybius into Latin. He also promised Filelfo the sum of ten thousand gold florins for a metrical rendering of Homer. Even when the plague drove him and his court from Rome, he took with him all his copyists and

translators lest he should lose any of them. His collection of books numbered at his death two thousand volumes and became the nucleus of the Vatican Library. Cardinal Bessarion, the translator of Aristotle and a part of Xenophon, collected, at a cost of thirty thousand gold florins, manuscripts to the number of six hundred. For the safe keeping of these, the Venetian Republic, in 1468, erected a massive building, and thus laid the foundation of the great Library of St. Mark. The noblest Italian collection which existed at this time was that of Frederick of Urbino (1444-1482). Even as a boy he had begun to purchase books, and as soon as he reached manhood he kept some forty copyists continually at work. His library was one of the most complete of the age, including a wide range of literature which represented not only theology, but philosophy, medicine, and a list of Greek authors, comprising all of Sophocles, all of Pindar, and all of Menander.² In his possession were catalogues of all the great libraries of Italy and of foreign libraries, including even

¹ Also called Federico di Montefeltro.

² The complete Menander was probably lost at the sack of Urbino by Cesare Borgia. Scholars hope for the ultimate recovery of books that have been regarded as wholly lost. The Egyptian papyri may prove a valuable source. Thus very recently they have yielded parts of Bacchylides and Menander. The mediævals possessed MSS. of authors now lost. We may now look for the missing books of Livy, for the MSS. of Petronius, for all of Menander, and perhaps for the lyric poets like Sappho, Alcæus, and others of whose writings only the veriest fragments are now known to exist. See Burckhardt, op. cit. i. p. 268.

those so far away as Oxford. It is worth noting that his collection contained not only ancient works, but what was then "modern," that is to say, contemporary literature - Dante, Petrarca, and Boccaccio. Here was the true type of humanist, and one that modern classical scholars would do well to emulate. Too often they narrow their knowledge to a small corner of a specialty which profits only two or three, and they ignore the great golden world outside, pulsating with life and filled with millions of things of which no one should be altogether ignorant. The present writer has himself come in contact with purblind ignoramuses who were supposed to be classicists but who really knew nothing of the classics, because they were ignorant of the thousand and one things which shed an interpretative light upon classical learning through the varied, multicoloured sources of general literature and history and politics and art. These are the creatures who have too often dragged the classics down to the level of their own ignorance. One may wish to-day for a new Renaissance which shall be actuated with the same wide sympathy and the same comprehensive learning that marked the great Revival in the fifteenth century.

But, after all, the greatest services in the recovery of classical texts were rendered, not by popes and princes, but by less distinguished persons who, having little money to spare, gave the more freely of their time and labour. These went forth like seekers after hidden treasure in a search

that had for them, in their enthusiasm, all the romantic zest of a new Crusade. It must be remembered that while Italy was ablaze with the ardour of the new revival, the rest of Europe was still plunged in the dulness of Mediævalism. Only here and there had some single scholar yet caught the spirit of the Renaissance. The monasteries were still as somnolent as ever. The schoolmen were still threshing out their mouldy theological chaff. The copyists of the North were still erasing Vergil and Catullus and Lucretius to make room for Rabanus Maurus and Duns Scotus.

Into these sleepy haunts came the scholars of Italy, eager to search among the parchments that lay in dusty bundles in the scriptoria, the cellars, and sometimes even the outhouses, for any scroll or scrap that contained the Latin of pagan Rome. The story of these explorations, of the difficulties encountered, of the rebuffs experienced, of the disappointments undergone, and of the splendid discoveries achieved, would read like a romance; but it cannot be related here. One name in the history of this period is, however, so closely linked with the recovery of priceless manuscripts, as to justify at least a passing mention, because of the services which he rendered in the revival of learning and more especially in what we may call the excavation of texts hitherto unknown. Many scholars have shown their gratitude to him by calling the first half of the fifteenth century "The Age of Poggio Bracciolini."

Gian Francesco Poggio Bracciolini 1 was a Florentine. who, as a young man, gained his living by copying manuscripts. From his fees he was able to pay for instruction under two of the greatest teachers of his time — Giovanni da Ravenna in Latin and Manuel Chrysoloras in Greek. Later he became secretary to the Roman Curia, and in this capacity he accompanied the great dignitaries of the Church on their official visits to Switzerland, Germany, and even England, so that the notes of these journeys which he made are very interesting from their quaintness and naïveté. In 1453, he was made Chancellor to the Republic of Florence, Prior, and Historiographer, in which capacity he wrote the annals of the city in Latin modelled upon that of Livy. Poggio was a man of great versatility, wide sympathy, and an intense enthusiasm for classical literature. His literary activity was remarkable, even in that era, for he won distinction as an orator,2 as an historian,3 as a keen though scurrilous controversialist,4 as a satirist,5 as a writer of very readable epistles,6 as an essayist, as a translator from the Greek, and as a compiler of witty though indecent anecdotes and epigrams.9 It is not, however, for these things, nor for his fluent and easy Latin, that he is now remembered. His

¹ 1380-1459.

² Orator Publicus of Florence.

³ History of Florence.

Against Filelfo (q.v.).

⁵ He attacked chiefly the clergy. ⁶ Especially regarding his travels.

⁷ Imitating Seneca. ⁸ He translated Xenophon's Cyropadia.

⁹ Collectively styled Facetia.

fame to-day rests upon his remarkable discoveries of manuscripts in the convent libraries of Germany and Switzerland chiefly, at Weingarten, Reichenau, and St. Gallen. Without recalling minor details, it is sufficient to say that he brought to light the whole of Ouintilian, twelve plays of Plautus, Asconius Pedianus, Ammianus Marcellinus, Nonius Marcellus, Probus, and Flavius Caper, together with a part of Valerius Flaccus. Among his other trouvailles were valuable manuscripts of Lucretius,1 Columella, Silius Italicus, Vitruvius, Livy, Manilius, Priscian, Frontinus, the Silvæ of Statius, the oration of Cicero Pro Cæcina, and the Aratea. If Poggio's means permitted him to buy a manuscript, he bought it. If he could not buy it, he copied it. If he could neither buy it nor copy it, he stole it, as in the case of a valuable manuscript of Livy and one of Ammianus at Hersfeld.²

No pains were spared by him, and no fatigues or difficulties could discourage him. As his friend Francesco Barbaro wrote: "No severity of winter cold, no snow, no length of journeying, no roughness of roads, prevented him from bringing to light the monuments of literature." He used his influence with the prelates of the Church to aid him. A certain Dane had informed

¹ This manuscript is one of the three-copies made from a single archetype which has long been lost. From Poggio's copy were made all the Italian manuscripts of Lucretius.

² At least there is no record of his having returned them, as it was his usual practice to note.

the Pope that in a Cistercian convent at Röskilde there was a manuscript of Livy containing all of the lost books. Poggio at once persuaded Cardinal Orsini to send a special messenger in search of it, while Cosimo de' Medici bestirred himself and despatched agents to secure this treasure. The Dane, however, had probably lied, for the manuscript could not be found. Poggio's own account of how he discovered Quintilian is interesting because it shows that even in the most famous libraries of the North, the books which they contained were very little valued for their own sake. Poggio writes:—

"The monastery of St. Gallen lies some twenty miles from the city. Thither, partly for amusement and partly for the sake of finding books, of which we had heard that there was a large collection in the convent, we directed our steps. In the middle of the well-stocked library, we discovered Quintilian safe as yet and sound, though covered with dust and filthy from neglect and age. You must know that the books are not housed as they deserve, but were lying in a most foul and dismal dungeon at the very bottom of a tower, — a place into which condemned criminals would hardly have been thrust. . . . Quintilian was indeed right side to look upon, and ragged like a felon with rough beard and matted hair, protesting by his countenance and garb against the injustice of his sentence. He seemed to be stretching out his hand and calling on the Romans, begging to be saved from so undeserved a fate." 2

¹ This complete manuscript of Quintilian, Poggio copied with his own hand in thirty-two days and sent it to Leonardo Bruni, who wrote back to him: "As Camillus was called the second founder of Rome, so may you receive the title of the second author of the works which you have restored to the world."

²There is a life of Poggio in English by Shepherd (Liverpool, 1837).

Side by side with this narrative, we may set the similar account of Boccaccio's visit to Monte Cassino: 1—

"Desirous of saving the collection of books . . . he modestly asked the monk to open the library for him as a favour. The monk stiffly answered, as he pointed to a steep staircase: 'Go up; it is open.' Boccaccio gladly went up; but he found that the place which held so great a treasure was without a door or key. He entered, and saw grass sprouting on the windows, and all the books and benches thick with dust. Astonished, he began to open and turn the leaves of first one tome and then another, and found many and various volumes of ancient and foreign works. Some of them had lost several sheets. Others were snipped and pared all around the text and mutilated in different ways. . . . Coming to the cloister, he asked the monk whom he met, why these valuable books had been so disgracefully mutilated. The answer was given him that the monks, in order to gain a little money, were in the habit of cutting off sheets and making psalters which they sold to boys. The margins they made into charms and disposed of them to women."

Other famous discoveries that were made about this time were those of fairly complete manuscripts of Cicero's letters by Leonardo Bruni (1409), of Cicero's rhetorical works by Gherardo Lanbriano, at Lodi (1425), and of a fairly complete manuscript of Plautus by Nicholas of Trèves (1429). Of the Greek classics the most famous collector was Giovanni Aurispa. In 1423, he arrived at Venice with 238 volumes which he had purchased in Constantinople. Among these were the celebrated Codex

¹ Quoted from Benvenuto da Imola, by Symonds, op. cit., pp. 133-134.

Laurentianus ¹ written in the tenth century and now preserved in the Laurentian Museum at Florence. It contained six plays of Æschylus, seven of Sophocles, and the Argonautica of Apollonius Rhodius. There were also the Iliad (Venet. A), the complete text of Demosthenes, besides Plato, Xenophon, Diodorus, Strabo, Arrian, Athenæus, Lucian, Dio Cassius, and Procopius. So great a mass of treasure in the field of manuscript-collecting was never found by any other individual.

It was about this time that some of the later Byzantines began to be known in the countries of the West. The name of Manuel Chrysoloras has already been mentioned. He taught Greek in Florence, Venice, and Rome, and pursued his journeying to the North, where he died, in Germany (1415). He made a literal translation of Plato's Republic; and his contemporary, Plethon, did much to spread the Platonic philosophy. Theodorus Gaza, in the early part of the fifteenth century, wrote an elementary Greek grammar, and made translations of Aristotle, Theophrastus, Ælian, and Dionysius, besides

¹ Codex, originally meaning a log of wood, later meant wooden tablets covered with wax for writing on, and in after times, when parchment or paper or other materials were substituted for wood and put together in the shape of a book, the name codex was applied to it. In the language of classical scholarship, codex is used of any manuscript edition preserved in the libraries of Europe. Codices are sometimes named after persons who possessed them, e.g. the Codex Vossianus, named after the Dutch scholar Voss; but oftener after the places where they had been kept, e.g. Codex Britannicus from the British Museum.

turning the De Senectute and the De Amicitia of Cicero into Greek. It must be said, however, that the Italian humanists stood high above the Greeks who came to teach them. The latter were slow and unimaginative and plodding — essentially Byzantine. They were hewers of wood and drawers of water to such brilliant Italians as Francesco Filelfo, itinerant, lecturer and teacher, witty controversialist, collector of manuscripts, and translator of Homer; or his brilliant contemporary, Laurentius Valla (Lorenzo della Valla); or Marsilius Ficinus (Marsiglio Ficino); or the immensely erudite Angelus Politianus; and especially Petrus Victorius (Pietro Vettori).1 The men just mentioned have been made the subject of many volumes, and in their lives, their achievements, and their controversies, one finds displayed the virtues and the vices, the enthusiasms, and the illuminating ardour of the Renaissance. Filelfo, roving from place to place, seems like one of the greater Sophists of the time of Socrates.2 Valla, though scurrilous like Poggio, prepared in 1444 a volume which he called Elegantia Latini Sermonis. It was essentially a treatise on style, on purity of diction, practically on Ciceronianism. During the Middle Ages and later, it was difficult to write Latin with any assurance, since there were no full lexicons whose makers had sifted out the classical words from the barbarisms of the preceding centuries, nor

^{1 1499-1584.}

² Supra, pp. 49-51.

were there any grammars which taught authoritatively what was right and what was wrong in the syntax of the Latin language. Valla did not attempt to indicate barbarisms; but he took a safe stand on the basis of Cicero's Latinity. He could say that such and such a sentence or such and such a phrase or word was right because it was Ciceronian. Other sentences and phrases and words might be quite correct, but one could not be sure. That is to say, Valla's book was a guide to Ciceronians, and was executed with so much care and taste that it imposed upon Italians the Latin that was Cicero's, and in less than a hundred years it had reached its fifty-ninth edition. Even to-day it may be consulted with profit. Valla, likewise, translated Homer, Herodotus, and Thucvdides: while he made an edition of Quintilian with careful attention to the text and doctrine.1

Politianus, who took his name from Monte Puliciano, had a wonderful reputation in his time. He began his studies in both Latin and Greek at Florence under the best teachers, and when scarcely fifteen years of age, he wrote a poem of 1400 lines celebrating the victory of one of the Medici at a tournament. At seventeen he wrote exquisite Greek poems. Lorenzo de' Medici made him tutor to his two sons, and afterward gave him

¹ See Vahlen, Lorenzo Valla (Vienna, 1870); Nisard, Les Gladiateurs de la République des Lettres, etc. (Paris, 1889); Wolff, Lorenzo Valla (Leipzig, 1893); Schwahn (Leipzig, 1896); and Symonds, op. cit. pp. 258–265.

a charming villa where he could study under the most favourable conditions. Being sent as an ambassador from Florence to Rome, he was received in the most flattering manner by the Pope. At the request of His Holiness, he translated Herodianus and received 200 gold crowns as a reward. As a translator, he was inimitable, but he preferred professorial work, filling a chair of Latin literature in Florence, and also teaching Greek. His fame spread all over Europe, and pupils flocked from the great cities to study under him, among them being the first two English teachers of Greek — Grocvn and Linacre — and Michelangelo. One may rightly say that Politianus was perhaps the most brilliant scholar of the first period of the Renaissance, since he was not only vigorous but original. While able to reproduce the noble periods of Cicero, he could write with equal ease pages which recalled the elegance of Livy and the strength of Tacitus. His Latin verse is especially to be noted for its beauty of expression and for the glow of its author's imagination.1

As for Victorius, he stands as the greatest philologist and critic of his century. His life was one of wide experience, for he was at various times a soldier, a diplomat, and a teacher of Greek and Latin. He made text editions and commentaries on Cicero, which surpassed in acuteness the work of his contemporaries. Like Politianus,

¹ See Gresswell, Life of Politian (London, 1805).

he translated some of the works of Aristotle. Editions with notes were put forth on parts of Æschylus, Sophocles, Xenophon, Terence, Sallust, Varro, Isæus, and some less known Grecians. But his most remarkable production is his *Variæ Lectiones*, in thirty-eight books (1582). It shows beyond all question the acuteness of his criticism and the vast extent of his reading. He had the honour of being painted by Titian, and of being sought out by students from all countries in Europe.

Victorius was especially interesting in his criticism and exposition of Aristotle's *Poetics*. He interpreted the famous κάθαρσις in 1560, very much as Roborteli had done twelve years before, and as Castelvetro did ten years later. In his criticism, he attacks the notion of poetic prose, because Aristotle in defining the poetic forms makes verse always an essential. Professor Spingarn notes that the phrase "poetic prose" is used, perhaps for the first time, by Minturno (1564) in his *Arte Poetica*.

The two great names of Politianus and Victorius shine forth to give splendour to the closing years of the first period of the Renaissance, which is perhaps best called the Italian Period. It had witnessed the dawn of the New Learning. It had watched the enthusiastic revival of pagan culture, and it had restored to Western Europe immense treasures of ancient lore.² By the end of the

¹ See Creuzer, Opusc. ii. pp. 21-36 (Frankfürt, 1854); Rüdinger, Petrus Victorius (Halle, 1896).

² The immense demand for manuscripts of lost authors rather natu-

fifteenth century, and even by the middle of that century, this remarkable movement had swept onward to the North and was nearing its height in countries remote from Italy, but owing to Italy their inspiration. The first breath of the Renaissance was soon felt in France, with which Italy had such close relations, then in Germany, in Belgium and Holland, in England, and in Spain and Portugal. Perhaps the close of the Italian Renaissance may be regarded as almost coincidental with the Introduction of printing. The typographical art was very gradually developed in Italy and Spain. At first, initial letters in manuscripts were stamped in ink from engraved blocks of wood. Then these engraved blocks were used for making playing cards, for ornamenting woven fabrics, religious pictures with or without lettering, engraved words without pictures, and finally the wooden blocks developed into types of single letters founded in a mould.

Who first employed these movable types, no one can surely say. It makes no difference, however, whether

rally led to an extraordinary number of literary frauds. A great many skilful scribes who were also men of ability made large sums by writing on parchments spurious works which they ascribed to the Greeks or Romans of renown. This was not a new thing, since as far back as the Alexandrian School many fictitious odes of Sappho were in circulation, and likewise didactic sayings wrongly ascribed to Theognis, and erotic songs to Anacreon. See Gudeman, "Literary Frauds among the Greeks" in Classical Studies in Honour of Henry Drisler (New York, 1804).

we name Gutenberg or Coster or the unknown workman who is said to have stolen the invention from Coster at Mainz in Germany and then to have made small movable printing presses. There are also the names of Fust and Schöffer. Certain it is that printing was known about 1430, and that regular presses were set up about 1448. We may, therefore, say that the year 1450 marks the End of the Italian Renaissance. The introduction of printing was of immense importance to men of learning, for it multiplied copies of the best-known classics, and by putting the apparatus for critical work into the hands of every scholar, it paved the way for a general and comparative scientific study of classical texts.1 The use of printing spread with remarkable rapidity. The great centres of book production were Venice, Rome, Cologne, Strassburg, Nuremberg, Augsburg, and Mainz. Before the close of the fifteenth century, there were twenty-two printing establishments at Cologne, twenty at Augsburg, seventeen at Nuremberg, and sixteen at Strassburg.² The most famous printers, whose names continually appear in the history of early editions, were Fust and Schöffer at Mainz, John Auerbach at Basel (1492-1516), Zell at Cologne, the Aldi at Venice (1490-1597),3 John Froben

¹ See Prutz, The Age of the Renaissance (New York, 1902).

² See Cotton, Typographical Gazetteer, 3d ed. (Oxford, 1852–1866).

³ See Brunet, Manuel de Libraire, etc., 8 vols. (Paris, 1880); De Vinne, The Invention of Printing (New York, 1878); Hoe, A Short History of the Printing Press (New York, 1902); and Faulman, Geschichte der Buchtruckverkunst (Vienna, 1882).

at Basel (1496-1527), and Christopher Plantin at Antwerp (1554-1589). The first press to be set up in England was that of William Caxton in 1477. The first press in the Western Hemisphere was established in the city of Mexico in 1540; and the first to be set up in the British Colonies in North America dates from 1638 at Harvard College and still survives under the name of the University Press.¹

Hence, the first great impulse toward the freer spirit of ancient times swept over Italy, surging on to other countries, where its influence took many forms. The Renaissance was in reality not so much a new epoch, but rather a harking-back to the civilisation of classical antiquity, which it modified to suit the New World of Southern Europe. In classical scholarship, we find, as in the early days of Greece and Rome, first, the accumulation of material for study; the expansion of that study in various ways; the development of Criticism which calls into its service many ancillary studies—Palæography, Palæography, Numismatics, a knowledge of the

¹ The first printed editions of classical authors is interesting. Thus the editio princeps of any ancient was printed at Rome and was a copy of Cicero, De Officiis, in 1465. The first work printed in Greek was the Έρωτήματα of Constantinus Lascaris (Milan, 1476). Theretofore, in printed Latin books, Greek words had been inserted with a pen. This work of Lascaris was set up according to its parts at various places and times, and gathered together by Aldus into one book (1495).

² See Spingarn, History of Literary Criticism in the Renaissance (New York, 1899).

³ As with Giovanni Aurispa.

⁴ As with Cyriacus of Ancona, who said that inscriptions seemed to give a greater reason and a truer knowledge than even books themselves.

Graphic and Plastic Arts,¹ Architecture,² and finally the invention of a means for making the *apparatus criticus* of learning accessible to every one.

Thus, the Renaissance, though not, as Michelet describes it, "the discovery of the World and Man," was, as Walter Pater said, "a love of the things of the intellect and the imagination for their own sake." It was an intellectual sunburst, which restored to modern times all that was glorious in the centuries of Greek and Roman culture. Dr. Sandys points out that the metaphor of a new birth was first associated with the earliest revival of learning, under Charlemagne, by Modoin, the Bishop of Autun, in this golden line:—

Aurea Roma iterum renovata renascitur orbi.3

- ¹ As with Donatello and later with Michelangelo and Bramante.
- ² As with Brunelleschi (1377–1446), one of the greatest architects of the Renaissance. It was he who, more than any other, revived the Roman or classic forms of architecture.
- ³ For a critical history of the Renaissance see Voigt, Die Wiederbelebung des Klassischen Alterthums, 3d ed. (Berlin, 1893); Burckhardt, Geschichte der Renaissance in Italien (Stuttgart, 1890–1891); id., Kultur der Renaissance in Italien, 8th ed. (Leipzig, 1901); Symonds, The Renaissance in Italy (London, 1887); Walter Pater, Studies in the History of the Renaissance (London, 1888); Vernon Lee, Euphorion (London, 1884); Scott, The Renaissance of Art in Italy (London, 1888); Einstein, The Italian Renaissance in England (New York, 1902); Müntz, Precursori e Propugnatori del Rinascimento (Florence, 1902); Sandys, Lectures on the Revival of Learning (Cambridge, 1905); id., op. cit. pp. 1–123); Saintsbury, A History of Criticism, i. pp. 456–466; ii. 1–108 (London, 1901–1902); and for a convenient summary, Pearson, A Short History of the Renaissance (Boston, 1893). See De Vinne, Notable Printers of Italy during the Fifteenth Century (New York, 1910).

VII

DIVISION INTO PERIODS

As we have seen already, the inspiration given by Italian scholars extended rapidly over the whole of Europe. The first century or more is what is properly to be called the Renaissance itself; but since its effects have lasted down to the present day, it may be said that we, ourselves, are still living and experiencing the results of that great revival. Many scholars, therefore, would regard the Renaissance as continuing down into the twentieth century, calling the periods (1) the Italian, (2) the French, (3) the English and Dutch, (4) the German, and (5) the Cosmopolitan. This is a convenient mode of grouping the great personalities who were conspicuous in their respective periods; but roughly we may set down the fifty years or so which followed the beginning of the Italian Renaissance as the Post-Renaissance Period. In it we see the fruits of Italian culture gradually distributed throughout the different countries of Europe, until there were developed many schools of learning, each having a tinge of distinctive nationality.1

280

U

¹ See Nisard, op. cit., passim; Pökel, Schriftstellerlexikon (Leipzig, 1882); and Michaud, Biographie Universelle, Ancienne et Moderne, last edition, 45 vols. (Paris, 1843–1865).

\mathbf{vm}

THE AGE OF ERASMUS

WHILE the impulse given by Italy and Italian scholarship was quickly felt in every country, the other countries needed someone of commanding personality who should be able to interpret this great intellectual movement to the schools and peoples of Northern Europe. The New Learning must not be imitative, and therefore it must not remain Italian; but after its fundamental principles should be accepted, they must be dealt with according to the national instinct and temperament of each of the peoples of the North. He whose mission it was to perform this splendid work, and thus to stamp his memory upon the period of transition, was Desiderius Erasmus, the greatest humanist who has ever lived, and in whom Humanism itself is vividly personified. The facts about his life, as Professor Emerton has said, form a sort of Erasmus-legend, since they are taken from passages in his writings which have been styled autobiographical, though the author himself never so allowed them to be called. There remain also 1500 letters from his pen (for he was a voluminous and ready writer); representing at least 500 different correspondents - people of every grade in

ERASMUS 291

life, from the most lowly to those who sat on thrones. It may be added that a letter from Erasmus was regarded by a king as being no less precious and no less an honour than was a letter from the same writer to a village school-master. So great became his influence and so widespread his fame, that the fifty years from 1486 to 1536 constitute in themselves a period which may itself be called almost "The Age of Desiderius Erasmus."

Desiderius Erasmus was born at Rotterdam. According to tradition he was an illegitimate son, who was, nevertheless, lovingly cared for by his parents until they both died when he was fifteen years of age. He was taught in the well-known school at Deventer, and later at Bois-le-Duc, where he says that he "wasted" some three years, suffering from the narrowness and the discomfort of his life. Finally, he entered the monastery near Gouda, and during the ten years of his stay there, he took priestly orders. In 1492 — significant year! — he left the mon-

¹ The father of Erasmus was called, in his native Dutch, Gært or Gerard; hence the name of Erasmus in the vernacular was Gært Gært's. This name, Erasmus himself Latinized and Græcized into Desiderius Erasmus. The powerful and historically accurate novel by Charles Reade, The Cloister and the Hearth, gives a fictitious account of the elder Gært. The book may be commended to the most serious reader, since it displays the later Middle Ages and the early Renaissance in minute detail, while yet its careful knowledge has been fused by the genius of a great writer into something that is singularly consistent and alive. George Eliot's Romola is pale and introspective beside this masterpiece of Reade, in which every page displays the author's virility and erudition.

astery, and, taking up his abode at Paris, he began what we should now describe as a literary career. But having regard for the different conditions at that time, he might better be termed an independent scholar, teaching and writing, and thus making an income which brought him, together with fame and many favours, the right of living as he would and where he would. His mind was stimulated by much travel, for he passed to Louvain, to England, to Basel, to Freiburg, and he spent three years of his life in Italy. But here we note a curious fact: that the man who was to spread Italian culture through the North was himself a son of the North, receiving in the North the foundations of his genial and brilliant scholarship. He was, however, in fact, a genuine citizen of the world, a true cosmopolite, equally at home in every country, and always sure of a friendly greeting. How thoroughly denationalized Erasmus was may be seen in the fact that when he was offered a readership at Louvain he declined it, because he was not sufficiently familiar with the Dutch language -his native tongue! It is, indeed, quite certain that, though he lived at times in Paris, he understood little French; that, though he was frequently in Germany, he knew no German; and that, however greatly he admired Italy, his knowledge of Italian was very slight. In fact, his only language was the language of the cultivated world over which he reigned as king, - a sort of Latin, which he spoke with the utmost fluency. Its syntax was

purely classical. Its vocabulary was adapted and enlarged so as to mention modern things. But this adaptation and enlargement were largely effected by the influence of Analogy, so that his newly coined words seemed as purely Roman as did the newly coined words of Plautus. Having a perfect command of this noble instrument of speech, he could travel from country to country, and meet the distinguished men of every centre of learning without considering whether their native tongue happened to be French or English or Dutch or German or Italian. Latin, adapted to every condition or state of life, rich for the eloquence of the orator, easy and playful for the genial converse of social life, majestic and sonorous for the stately ceremonies of religion, — here was the *lingua linguarum* in this Golden Age of scholarship and letters.

The personality of Erasmus was so delightful that in every country, in every town, and especially in every abode of learning, he was welcomed as a friend and almost as a monarch. Indeed, more than one king urged him to attach himself to the royal court, and by his mere presence give to it an additional lustre. But Erasmus cared little for courts. He preferred the sympathetic companionship of such men as William Grocyn, who first taught Greek at Oxford, of the great Chancellor of England, Sir Thomas More, and of Archbishop Warham, who settled upon him a liberal income for life. He was one of the group

¹ See *supra*, pp. 145-147.

of cultivated men who gathered around the famous publisher, John Froben, at Basel; and in like manner, he was an intimate friend of the Venetian publisher, Aldus Manutius, and knew well all the members of the circle associated with the Aldine Press.¹

His writings fall under several heads. At first, he criticised some of the abuses which had sprung up in the Catholic Church, and he made fun of the scholastic method in philosophy. The drift of many of his works is to show that forms are of little value in religion, while the spirit of genuine piety is everything. A second phase of the lifework of Erasmus is found in his editions of the works of Aristotle and Demosthenes, with translations, in part, of Euripides, Lucian, and the Moralia of Plutarch. Of Latin authors, not including the Patristic writers, he edited Terence and parts of Cicero and Livy. More important than these achievements, and in fact quite epoch-making, was his critical revision of the New Testament. We have already seen that such a stupendous undertaking had been suggested by Lorenzo Valla, in his Annotations to the New Testament.² Erasmus, in a preface to this work of Valla's, pointed out the obvious fact that no correct translation of the Bible could be made except by a trained linguist, and

¹ See supra, p. 286.

² Supra, pp. 241, 281-2. This tractate by Valla seems to have been recovered by Erasmus in the year 1505. It represents the starting-point in Biblical criticism and exegesis.

that the original Greek manuscripts ought to be carefully revised and compared. Evidently, he began at once to equip himself for such an undertaking; for in 1512—seven years later—he writes to the Englishman, John Colet, the founder of St. Paul's School, and says that he has already collated the New Testament with the ancient Greek manuscripts, and that he has annotated it in more than a thousand places.

The work, when completed, was published at the press of Froben in Basel. It is very easy to criticise it now, and in its own time it was criticised chiefly because Erasmus never attained the sure knowledge of Greek that some of his contemporaries possessed. He himself once said: "My Greek studies are almost too much for my courage, while I have not the means of securing books or the help of a master." He also wrote that "without Greek the amplest erudition in Latin is imperfect." This, of course, was in his early years. Long afterward he rendered into Latin the Greek grammar of Theodorus Gaza, while his Greek texts mark the climax of his learning. It is also to be noted that in 1528 he published a dialogue called *Ciceronianus*, in which he discussed Latin style, protesting against limiting modern Latin to a pedantic imitation of

¹ For instance, Guillaume Budé (Gulielmus Budæus), the French philologist, who was a distinguished Grecian, much superior to Erasmus. See his *Life* by E. de Budé (Paris, 1884).

² Such as his translations and editions already mentioned, besides his critical works on some of the Greek Fathers.

the vocabulary and phraseology of Cicero.1 This was interesting as marking the coming break between the Italian School of Latinity, which was strictly Ciceronian, and the other schools which were presently to arise in Northern countries. In the same year he also wrote his treatise on the correct pronunciation of Latin and Greek.2 With regard to Greek, he established a pronunciation which has been practically adopted in all the Northern countries of Europe and in the United States, and which is known after him as "the Erasmian Pronunciation." Somewhat later another method, called "the Reuchlinian Method," was proposed,3 and was known for its "Iotacism" because of the vowels, η , ι , v, $\epsilon\iota$, and $v\iota$, all have the sound of iin the word machine. It might have been argued that, since Greek remains a living language, scholars ought to pronounce it as the Greeks of that day pronounced it; but many changes had crept in since the classical period, so that the pronunciation of educated Greeks was known to differ very largely from the ancient pronunciation. Hence, as a common standard, most countries have held to the Erasmian method.

As to the pronunciation of Latin in the time of Erasmus, it was largely that of the Italians, a fact made

¹ Infra, p. 303.

² See W. G. Clark in the (English) Journal of Philology, i. 2; 98-108.

³ By Johann Reuchlin (Ioannes Capnio), an admirable Grecian, and also an erudite Hebrew scholar, who lived in the time of Erasmus, and was regarded as second in learning only to him.

evident by Erasmus himself in his use of one pronunciation in whatever country he might be, and before whatever universities he might lecture. Scholars retained for all practical purposes the most essential features of it, because, coming from all the countries of Europe and fraternising everywhere, this intercourse tended to maintain a general tradition which was not seriously disturbed for some time after.¹

Erasmus, though easy-going and fond of social pleasure, nevertheless accomplished an amount of serious work which is prodigious when one gathers it together and views it as a whole. Concerning his semi-theological works this is no place to speak; and yet they give a very characteristic picture of his mental attitude toward life, and toward all things that have to do with life. In the early part of his career he wrote books which, with keen wit, satirised the failings of the clergy. Such were his Adagia (1508), his Encomium Moriæ, or Praise of Folly (1509), and especially his famous Colloquia, or dialogues (1524), which abound in lively satire, and flashes of inimitable wit.

¹ See Erasmus, De Recta Latini Græcique Sermonis Pronunciatione
(Basel, 1528); Zacher, Die Aussprache des Griechischen (Leipzig, 1888);
Blass, The Pronunciation of Ancient Greek, Eng. trans. (Cambridge, 1890);
and Corssen, Ueber Aussprache etc. der Lateinischen Sprache (Berlin, 1870).

² His writings may be classed as (a) theological; (b) satirical; (c) educational; (d) philological; (e) critical; (f) literary; as in his very numerous letters, and (g) expository in such lectures and discourses as he chose to give in a delightfully unconventional way.

But when Martin Luther broke with the Church, and declared his independence of the Papacy, Erasmus could not follow him. His tranquil good sense, while it admitted that certain abuses were temporarily to be seen, had no sympathy with Luther, but believed that all these wrongs would right themselves through the wisdom of the Church itself. Therefore, he refused to break with the splendid traditions of papal Rome, and he died a Catholic, although not greatly heeding external forms in his religion. This fact deserves mention here because it shows how truly and unfeignedly Erasmus was a humanist—as truly as was Horace in the Augustan Age at Rome. His motto might well have been that of the genial poet who praised the Golden Mean, and who declared:—

"Est modus in rebus, sunt certi denique fines, Quos ultraque citraque nequit consistere rectum."

Professor Emerton does not admit that Erasmus was a genius; yet who but a very great genius could have accomplished what was accomplished by Erasmus? Who, at that particular moment, could have been so absolutely the Man of his Time? He exercised, by his peculiarly winning personality, an influence which was felt all over Europe. He was a king of letters, a man of extraordinary reading, of a sane and yet brilliant and original mind, a contributor in a score of ways to the progress of learning and the unification of classical philology. All his influence was for

good. There was no blot upon his character, and his aspirations were always noble. He had no personal pride as to his own accomplishments; he was "a friend of all the world." The work which he performed in all these different ways was a serious one, and it was seriously expressed by Erasmus in two sentences that were penned by him in the year before his death:—

"I used my best endeavours to free the rising generation from the depths of ignorance, and to inspire it with a thirst for better studies. I wrote, not for Italy, but for Germany and the Netherlands." 1

IMPORTANT EDITIONES PRINCIPES OF THE FIFTEENTH CENTURY

I. GREEK

- 1481. Theocritus (Id. 1.-xvIII.), together with Hesiod, Works and Days.
- 1488. Homer (ed. Chalcondylas). Valla's Latin trans. of the *Iliad* was printed as early as 1474.
- 1495. Hesiod, Opera omnia (Aldus).
- 1495-98. Aristotle (Aldus).

¹ Erasmus, Opera, ix, 1440 (Basel, 1540). See the lives of Erasmus and the studies of his character and work by De Laur (Paris, 1872); Nisard, Erasmi Epistolæ, i (1484–1514), edited by P. S. Allen (Oxford, 1906); Jebb, Erasmus (London, 1890); Froude, Erasmus (London, 1894); Emerton, Erasmus (Cambridge, 1899); Pennington, Erasmus (London, 1901). See also Nichols, The Epistles of Erasmus (1901–1904); Woodward, Erasmus on Education, (New York, 1904); De Nolhac, Erasme en Italie (Paris, 1888); and Sandys, Lectures on the Revival of Learning, pp. 162–167, and pp. 177–178 (Cambridge, 1905).

300 HISTORY OF CLASSICAL PHILOLOGY

- 1496. Euripides, Med., Hypp., Alc., Androm. (Lascaris), Apollonius (Lascaris), Lucian (in Florence).
- 1498. Aristophanes (excl. Lys. and Thesm.).
- 1499. Aratus (In Astronomi vett. ap. Aldum).

II. LATIN.

- 1465. Cicero, *De Officiis*. First printed edition of a classical author. Cf. art. "Typography" in Encycl. Brit. Lactantius (Rome).
- 1469. Cæsar, Vergil, Livy, Lucan, Apuleius, Gellius (Rome).
- 1470. Persius, Juvenal, Martial, Quintilian, Suetonius (Rome).

 Tacitus, Juvenal, Sallust, Horace (Venice), Terence (Strassburg).
- 1471. Ovid (Rome, Bonn), Nepos (Venice).
- 1472. Plautus (G. Merula), Catullus, Tibullus, Propertius Statius (Venice).
- 1473. Lucretius (Brixiæ).
- 1474. Valerius Flaccus (Bonn).
- 1475. Seneca (Prose Works), Sallust (first volume issued in octavo).
- 1484. Seneca (Tragedies) at Ferrara.
- 1485. Pliny the Younger (Venice).
- 1498. Cicero, Opera Omnia.¹

¹ See Brunet, Manuel de Libraire, 8 vols. (Paris, 1880); Schück, Aldus Manutius und seine Zeitgenossen (Berlin, 1862); Didot, Alde Manuce, pp. lxviii and 647 (Paris, 1875).

\mathbf{IX}

THE PERIOD OF NATIONALISM

THE task of Erasmus had been the binding together of Northern energy and Southern culture. He had practically made the whole world of Western Europe one in everything which pertained to scholarship. Learned men came and went with perfect freedom from country to country, from monastery to monastery, and from court to court, needing no passport, save the cachet of a liberal education. But this age of enlightenment was to last only for a short time. Even while Erasmus lived, the so-called Protestant Reformation burst forth in Germany, and soon divided all of Europe into hostile camps. ever may be one's religious belief, he can but regret the effect which this religious antagonism had upon the immediate future of classical scholarship. It divided countries according to the dogmas of their princes. It put a sudden and grievous end to the genial intercourse of humanists. It made the great universities appear like hostile fortresses, from which the inmates no longer sent forth works of learning for the benefit of every land alike; but rather missiles in the shape of angry tracts or ponderous tomes that wasted learning and altered the mellow geniality of Humanism into yelpings and vituperation, scattering vile language all over Europe. Thus, the Universities of Oxford and Cambridge in England, of Leyden and Utrecht in Holland, of Marburg, Königsberg, and Jena in Germany, thundered out their theological fulminations on the Protestant side, while from Würzburg, Gratz, Innsbruck, Paris, and Louvain, learned treatises were mingled with the most scurrilous abuse of Protestant scholars who had written on the same subject.¹

Nevertheless, the odium theologicum could not altogether eliminate the love of what had belonged to the earlier epoch. Luther might rage in Germany; and the papal sword might flash in Italy; while Holland and England drew together in a political and scholarly union, and France went its own way, Catholic as yet, but liberally so. The difference lay in the fact that scholarship took on different forms in different countries. The learned world was not united as it had been in the days of Erasmus. Young Englishmen had formerly visited Italy and Paris to pursue their studies; but now they went to Leyden or to Utrecht. The German student, according to his faith, went to a school or university where that faith was taught. The young Frenchman studied at one or another of the universities that were Catholic. Thus, classical scholarship in Europe became national rather than universal. As for Italy, its scholars had remained true to the early

¹ See Nisard, Les Gladiateurs de la République de Lettres (Paris, 1889).

Renaissance, so that the Italian School remained Ciceronian to the last degree, following closely the precepts of Lorenzo Valla. Its Latin was wholly that of Cicero. Not a word, nor a phrase, nor a line was tolerated, save when it could be shown absolutely to have the purity of diction and the rhythmic cadence of the great Roman orator. It is extraordinary to learn what pains were taken to secure this perfect imitation. Thus Cardinal Pietro Bembo was probably the most perfect imitator of Cicero that ever lived. His Latin in every shade, in every note, in every inflection, recalls the Latin of his master and model. It is related that he would not speak Latin with any casual scholar, lest by doing so he should mar the perfection of his own Latinity. Herein he was very different from Erasmus, whose colloquial style had been syntactically correct, while yet allowing his own personality to appear in everything that he wrote and said. This individual touch of his gave popularity to all his writings. He had special characteristic, of his own, — so that one could feel in all that was Erasmian the pungent wit, the sympathetic mood, and the geniality of the man himself. But Bembo and his fellow Cardinal, Sadoleto,2 the most distinguished representatives of the Italian School, wasted themselves on style alone. What they wrote and spoke was delightfully conceived in the Ciceronian manner,

¹ 1470-1547. See Symonds, The Renaissance in Italy, ii. pp. 409-415.

² 1477-1547. See Joly, Étude sur Sadolet (Caen, 1857).

but it had no force, no personal power to attract the listener. One felt that the writer or speaker was too self-conscious, and too much afraid of making a slight slip here or there. Hence the Italian School remained a school of literature, contenting itself with the authors of the Golden Age, whom they read and reread and annotated from a strictly literary point of view. It was a school of style — style always, and, therefore, style that degenerated into puerility.

As classical learning penetrated the countries North and West of Italy, it took on a more independent form. It, likewise, began to show a touch of the critical element, and also a desire to provide both instruments and aids for scholarly activity. Thus, in Italy, although many vocabularies and glossaries were produced, they were scattered and fragmentary, and each represented half a dozen others. It was in 1483, that Ioannes Crastenus printed the first Greek-Latin vocabulary, which increased in size as it passed through several editions. In 1497 a much more complete work of the same character was issued from the Aldine Press, and this was speedily followed by lexicons bearing the name of Calepinus, Budé (Budæus), Gessner, Constantine, and others. Most important is the dictionary of Budé (Paris, 1520; Basel, 1530). was re-edited and much enlarged by Robert Etienne, (Paris, 1548). This dictionary is the first to have been published after the Renaissance. It is particularly exact in its explanation of legal terms. Robert Etienne, or, as

he called himself, Robertus Stephanus (absurdly styled by the English, "Robert Stephens"), was at once a printer and a man of learning; and his son, Henri Etienne, or, as he called himself, Henricus Stephanus,1 were two very important figures in the history of classical studies in France. The father issued carefully collated editions of Horace, Dionysius Halicarnassensis, and Dio Cassius. But his most important production was his Latin dictionary (Thesaurus Linguæ Latinæ), which appeared in parts during the years 1531-1536. It was not an entirely original work, being based upon the vocabulary of Budé, yet for a long time no better lexicon was known to Europe. Henri Etienne, in 1572, published a work that is most remarkable. It was a Greek lexicon in five volumes (Thesaurus Linguæ Græcæ). It defined more than 100,000 Greek words with references to authorities. It was a compilation of remarkable industry and scholarship, and was many times re-edited — last of all by Dindorf (Paris, 1856 foll.). To this day, it remains unrivalled as being the most complete lexicon of Greek known to the world.

France was now the mother of a brilliant group of scholars, or at least the centre to which they flocked. The Collège de France, established by Francis I, gave shelter and recognition to many very remarkable men, constituting

¹ See Egger, L'Hellénisme en France, 2 vols. (Paris, 1869); id. pp. 198 foll.; Pattison, Essays, i. 62-124 (Oxford, 1889); Feugère, Essai sur la Vie et les Ouvrages de Henri Etienne (Paris, 1853); Pökel, s.v.; and Lefranc, Histoire du Collège de France (Paris, 1893).

what may be roughly called the French School of Classical Philology. This school was noted for its acute criticism and its wide range of encyclopædic knowledge. With the Etiennes must be reckoned the memorable names of Adrien Turnèbe (Hadrianus Turnebus), who was the greatest Greek scholar of his time; Denis Lambin (Dionysius Lambinus), Director also of the Royal Printing Establishment; Marc Antoine Muret (Marcus Antonius Muretus), one of the greatest stylists of any period; Charles du Fresne, sieur du Cange, a writer on Low Latin, whose glossaries are still in vogue, and have been many times reedited; Bernard de Montfaucon, the founder of scientific Palæography; and greatest of all, Isaac Casaubon (Casaubonus), whose prodigious learning was surpassed by only one man of his own time or for centuries after.

¹ 1512-1565. See Pökel, op. cit., s.v.; and Clément, De Adriani Turnenbi Praefationibus, p. 7 (Paris, 1899).

² 1520-1572. See Mattaire, Historia Typographorum Aliquot Parisiensium (London, 1717); the appendix to Orelli, Onomasticon Ciceronis, i. pp. 478-491 (Zürich, 1861), 3d ed.; and the preface to Munro's Lucretius, pp. 14-16.

³ 1526-1585. His orations and a part of his other works are printed; Teubner edition, ed. by Frey (Leipzig, 1887-1888); Pattison, Essays, i. 124-132, last ed. (Oxford, 1889); and Dejob, Marc Antoine Muret (Paris, 1861).

⁴ 1610-1688. See Hardouin, Essai sur la Vie et les Ouvrages de du Cange (Paris, 1849).

⁵ 1655-1741. See de Broglie, La Société de l'Abbaye de Saint-Germain, 2 vols. (Paris, 1891).

⁶.1559-1614. The standard life of Isaac Casaubon must apparently always remain that of Mark Pattison, ed. by Nettleship, 2d ed. (Oxford, 1892).

Turnebus was the most celebrated Grecian of this period, and his mind was intensely critical. Beside editing several Greek and Roman authors, he wrote commentaries on Varro de Lingua Latina, and on Horace. He likewise left thirty books of Adversaria, consisting of notes and critical comments, many of which were brilliant and of great value. Lambinus is to be remembered as having first made the text of Lucretius fairly intelligible. Before his time, whole passages had been impossible to read. But the critical mind of Lambinus threw light upon what had been dark, and by judicious emendation he gave to the world an edition of the great Epicurean, upon which Lachmann afterward based his epoch-making work. Lambinus spent. eleven years in Rome and devoted himself to the collation of manuscripts in the Vatican Library. At the end of that time (1561), he was called to Paris as Professor of Greek and Latin, and employed his profound learning with sobriety and admirable results, so that not only his editions of Lucretius, but those also of Plautus, Cicero, and Horace make his memory a very special one in the minds of classical scholars. Few of his contemporaries had such vast learning, and few had such profound knowledge of an author's style. He died of apoplexy, caused by the murders of St. Bartholomew's night. Modern commentators owe to Lambinus much of the material which they use without giving credit to this splendid scholar of the French Renaissance.

His contemporary, Muretus, spent several years as his companion in Rome, and became well known for his work in editing various classical authors, such as Terence, Catullus, Tibullus, Propertius, and Seneca. As a critic he produced a volume of Variae Lectiones, but he was most renowned for the purity of his Latin style. At the age of eighteen he wrote Latin with great fluency and ease, and afterwards in the University of Paris his orations in Latin seemed as splendid as those of Cicero. They were read indeed in schools side by side with Cicero as late as the end of the eighteenth century, and various editions were made of them.

One of the greatest of the Post-Renaissance scholars was Isaac Casaubon (Casaubonus), who deserved the title which Varro bore of being essentially a πολυΐστωρ. One of his contemporaries declared: "He is the most learned of all men who live to-day." He was born in Geneva, the son of a Huguenot minister, from whom he received all his instruction until he reached the age of nineteen. In these troubled years the family often had to flee from home to save their lives from their armed opponents. Pattison relates that, while hiding in a cave, Isaac received his first lesson in Greek. At nineteen he was sent to the Academy (now the University) of Geneva, where he studied Greek under Portus, a Cretan. When Portus died he recommended his learned pupil as his successor, and thus at the age of twenty-three he became Professor of Greek. Four years later he

was called to a like position in Montpellier, but there, as at Geneva, he suffered from lack of a sufficient library. Shortly afterward he went to Paris, owing to the influence of Henry IV. His Calvinism prevented him from receiving a professorship in the University, and instead he was made Royal Librarian, a position which he held until the murder of the King, when he felt his position insecure; so that in 1610 he crossed the Channel to England, where Tames I showed him great favour and made him prebendary of Canterbury Cathedral and Westminster. In the great abbey he lies buried. Casaubon was immensely erudite both in theological and in classical scholarship. As a theologian he wrote a work on ecclesiastical freedom (1607), and especially his Exercitationes Contra Baronium (1614), in which he sharply attacked the chronological work of Cardinal Baronius.1

Casaubon was not brilliant, nor was he possessed of so keen and searching a mind as that of his great contemporary Scaliger, but his tolerant spirit and enormous reading made him famous throughout Europe. Until he came to Paris he had been greatly hampered by the lack of books.

¹ Cæsar Baronius, who became Cardinal in 1596 and librarian of the Vatican (1597), was the author of the work mentioned above, a chronology from the birth of Christ to 1198 A.D. It cost him twenty-seven years of labour, and has been added to in modern times, even as recently as 1864. Baronius was a clever and diverting writer, but Casaubon charged him with many errors, owing to his ignorance of Greek and Hebrew. He died in 1607, and, therefore, never lived to read the attack upon him by Casaubon.

At Geneva and at Montpellier there were no libraries of importance. He was obliged to borrow necessary volumes from other scholars to whose homes he walked great distances. These volumes he copied laboriously with his own hand, and it is said that in the case of smaller books, he memorised them. Such practices, while tiresome, fixed in his memory the texts themselves and made him exceedingly exact in his learning. Many countries sought him out; but it was in England that his final home was made. He was welcomed at all the universities, and was especially agreeable to the King (James I), who was fond of theological discussion. In fact, on one occasion, when there was some difficulty about paying his pension, the King wrote with his own hand:—

"Chanceler of my Excheker, I will have Mr. Casaubon paid before me, my wife, and my barnes."

It was also by the personal intervention of King James that Casaubon's library, which had been stored in Paris, was sent over to England. The English people could hardly understand such favour, and Casaubon became very unpopular. He could speak no English, and his scholarship was not appreciated by the mob. Consequently, he was always in danger of some ruffianly assault. At night his windows were broken, and by day his children were stoned in the streets. In France, of course, after he had definitely decided not to return from England, he was equally disliked, being regarded as a renegade who had sold his religious

belief for English gold. He died in the year which witnessed the publication of a great controversial work which was, nevertheless, wholly unworthy of his powers.

Casaubon was a man of encyclopædic knowledge. He was as familiar with out-of-the-way authors, such as those of the Historia Augusta, and Dionysius of Halicarnassus, as with the better-known classics, such as Persius and Polybius. During the four years of his visit in England, he contributed little to Classical Philology. In fact, his most memorable books were those which antedate his stay in Paris, and at a time when his reading was done under so great difficulty. It was given to him to take up a number of authors, and so thoroughly to comment on them as to leave little for succeeding scholars in the way of exegesis. Thus he brought out an edition of the Characteres of Theophrastus as early as 1502, and an extraordinarily complete Athenæus in 1508.1 His exhaustive edition of Persius 2 was called by Scaliger "divine"; while his Suetonius passed through three editions in the course of a few years. In his Polybius³ is a remarkable introduction on the subject of Greek Historiography. Less full and of less lasting value were his annotations of other authors, but he deserves great and enduring credit for having been the first to study Roman

¹ Incorporated into Schweighäuser's edition (1840).

² Published in 1605, and pillaged by every commentator since that time.

³ Published in 1609.

satire, - a subject which was, and has been since, of remarkable interest to all classicists.

Still representing the French School of classical study, we have the remarkable lexicographer, Charles du Fresne, sieur du Cange, who did for Low Latin what Valla in an earlier century had done for the Ciceronian tongue. Holding a lucrative office in Paris, this scholar gave himself up for twenty years to unremitting industry, so that it has been said that the number of his books would be incredible if we had not the original manuscripts all written by his own hand. To enumerate them would here be impossible, but the two by which he is best known deserve especial mention. The first of them is a glossary, as he modestly called it, to the writers of Mediæval and Low Latin; 3 and a like glossary to the writers of Late Greek.4 Into these tomes he gathered all the words that he could find in legal documents, charters, manuscripts, diplomas, titles, and many printed documents, all written in the mixed language which prevailed in the Middle Ages and for some time afterward. His sources were drawn from the archives of Paris; and, therefore, ponderous though they were, succeeding scholars have added to them almost in each decade, until at present every issue is practically an Antibarbarus. From his pen came also an excellent edition of the Byzantine Historians. His Greek glossary was hardly so com-

¹ De Satyrica Græca Poesi et Romanorum Satira (1605).

² The original was edited by Rambach (Halle, 1774).

³ Glossarium ad Scriptores Mediæ et Infimæ Latinitatis (1678).

⁴ Glossarium ad Scriptores et Infimæ Græcitatis (1688).

plete as his Latin one, and in fact was published in the year of his death. His son lived only four years; and finally, the French Government, knowing how valuable were the writings of Du Cange, collected the greater part of his manuscripts, which are now contained in the Bibliothèque Nationale in Paris.¹

Worthy of recollection was another Frenchman of this period, Bernard de Montfaucon, a nobleman by birth, but forced through ill health to a life of seclusion and study. There are few incidents in his career which present much variety, since he passed successively from one abbey to another, examining and annotating their numerous manuscripts. From 1698 to 1701, he spent most of his time in Rome. His first publication was a work entitled Analecta Graca (1688), never completely finished. But he is best remembered in Archæology by his work in ten folio volumes,² in which drawings made by him of antique objects and monuments gave to the world something that was wholly new. It was one of the most interesting contributions made to the study of Archæology; and his Palæographia

¹ See Hardouin, op. cit. The last and most complete Glossarium to the mediæval Latin is that edited by Favre, 10 vols. (Niort, 1884–1887).

² L'Antiquité Expliquée et Representée en Figures. This book was a wonderful storehouse of antiquities. It was first brought out by subscription in 1719, and in less than two months the first edition (18,000 volumes) was sold, and a new edition of 2500 volumes was printed in the same year, with a supplementary edition of five more volumes. A full list of his contributions to Archæology will be found in the Nouvelle Biographie Générale, s.v.

Græca has never yet been superseded. Somewhat earlier (1681), there had appeared a work on Palæography,¹ written by Jean Mabillon, an inmate of the beautiful abbey of Saint Germain,² the earliest seat of the learned Benedictine Order in France. The validity of the abbey's charters had been attacked, and Mabillon wrote the work just mentioned to show how false documents could be distinguished from genuine ones, and how to determine the date of a manuscript by comparison with others. The difference between the work of Mabillon and that of Montfaucon lies in the fact that the latter dealt with Greek manuscripts alone, of which he gave a list of 11,630, whereas Mabillon had dealt alone with Latin.

The close of what has been called the French Period, though it shows us the colossal figure of Casaubon, has no one who can rival him. Nevertheless, a great cluster of accomplished scholars enter into the annals of the end of the seventeenth century. Such, for example, is the man of letters, Jean Bouhier (1673–1746), who cited the Petronian fragment De Bello Civili, besides translating it, and contributing to the Palæographia of Montfaucon. The most important consecutive portion of Petronius (i.e. the Cena Trimalchionis) was recovered at Trau (the Roman Tragurium) in 1663 by the Frenchman Pierre Petit (Marinus Statilius) and published by him at Paris in 1664. There

¹ De Re Diplomatica.

² See Vanel, Les Bénédictins de Saint-Maur (Paris, 1896).

³ See Introduction to Peck's *Cena Trimalchionis*, 2d ed. (New York, 1908).

were editions of Horace by Père Sanadon and others, while parts of Demosthenes and Cicero were translated by the learned Father de Thoulie, also known as Olivetus, who finally edited the whole of Cicero.

Classical Archæology was at this time further promoted by Bunduri, who wrote a prodigious work on the antiquities of Constantinople; by Michel Fourmont, who collected many inscriptions and forged many others; by Burette, who studied Greek Music; and by Nicolas Fréret, whose attempts in Ancient Geography and History were fairly accurate. A Frenchman (d'Anville), who lived four decades later than Fréret, published seventy-eight geographical treatises and two hundred and eleven maps, all admirably executed. A group of French scholars collected Greek and Roman coins as well as ancient gems. Among these collectors were Charles Patin, J. F. F. Vaillant, J. Pellerin, and P. J. Mariette, the last reproducing a large number of gems in his Pierres Gravées (1752). A French nobleman, the Comte de Caylus, who had served in the army, went to the East in disguise, visited Smyrna, Ephesus, and Colophon, actually traversed and examined the plain of Troy, and then, returning, carefully studied the monuments of Constantinople. He was a man of great wealth, and devoted more than two-thirds of it to his passion for antiquities. His magnificent house he filled to overflowing with works of ancient art - not only Greek and Roman, but also Etruscan and Egyptian. Whatever was interesting and beautiful he endeavoured to add to his collections. Two sumptuous works of his are the seven volumes which make up his *Recueil d'Antiquités*, and the reproduction by P. S. Bartoli which he caused to be made of the mural paintings found in the sepulchre of the Nasones.¹

The greatest masters of the French school had ceased with Montfaucon, or even earlier with Casaubon. Casaubon's final years in England seem to identify him with a different type of scholar. In fact, among his contemporaries, a number were in many ways different from the learned yet brilliant Frenchman whose style was almost that of the Italians in its purity, and whose criticism and comment were puissant and profound. The Netherlands, small, but full of intellectual life, produced a cluster of learned men, unrivalled in the history of the modern world. Of course, Erasmus had led the way, since by birth he was a Netherlander; but he belonged to no country and to no school. In his own time he was essentially a cosmopolitan, at home alike in Italy, in England, in Germany, and in France. It was, as we have said, the so-called Protestant Reformation that made it quite impossible for another Erasmus to exist until several centuries had passed. Between 1540, however, and 1650, the universities of Holland,2 had bred or had called to their chairs some of the most remarkable

¹ Peintures Antiques (1757).

² The University of Leyden was founded in 1575; that of Louvain in 1610; and that of Utrecht in 1636.

classicists that the world had ever seen. We may include among these Casaubon, though he studied at Oxford and spent his declining years in England, and with him we must group the famous Joest Lips—better known as Justus Lipsius, and finally the greatest scholar of all time, Joseph Justus Scaliger. These three men towered above all their contemporaries, who called them The Triumvirate. The rather uneventful story of Casaubon has been already told. The life of Justus Lipsius was fairly tranquil. But round Scaliger, the greatest of the three, there raged a conflict of wit and learning, which ultimately caused his death, and which gives us an illustration of how the division of Catholic and Protestant, both of them extremely militant, was inimical to learning.

Lipsius was educated in a Jesuit College, and had been at the Catholic University of Louvain. This, perhaps, is the reason why of the three great contemporaries, he alone died in the communion of the Church. His life was that of a wanderer. He roamed through Burgundy, Germany, Austria, Bohemia, and Italy. Though Pattison speaks of him as "a narrow pedant," he must have had something of the personal charm of Erasmus, for he made friends among the scholars whom he met. His first published work was a volume of critical miscellanies, which he dedicated to Cardinal Granvella, who secured for him an

¹ 1547–1606. ² 1540–1609.

² See Nisard, Le Triumvirat Littéraire au XVI^{me} Siècle. (Paris, no date).

appointment as Latin secretary and a visit to Rome, where he remained two years, studying carefully the monuments and inscriptions, and especially examining the manuscripts in the Vatican. A second volume of Varia Lectiones (1575), after his return from Rome, showed a decided advance in critical ability. He no longer leaned on conjectural emendation, but preferred to emend by the comparison (collation) of manuscripts, and he had learned to distinguish between what palæographers call "good manuscripts," and "bad manuscripts." His intercourse with scholars was as varied as that of Erasmus, but his theological difficulties were far greater. Thus, for a year, he taught in the Lutheran University at Jena. Soon afterwards we find him at Cologne, which was Catholic. Presently he returned to Louvain, whence he retired to Antwerp, where he received (1579) a call to the newly established University of Leyden as a professor of history. In his eleven years at Leyden (the Protestant University) he passed his time in classroom drudgery, and yet he found time to produce his two great masterpieces, — his edition of Seneca (1605) and of Tacitus (1574). This last work is a superb monument to his genius. It was published by a sort of growth, from one edition to another, until it became the most remarkable commentary on that difficult author. Lipsius had studied him so continually and with such intensity that he could repeat the whole of everything that Tacitus had written; and if any one doubted this, he would say:

"Put your sword to my throat and thrust me through if I make a mistake in a single word." His books were largely published by the famous press of Plantin at Antwerp, and there his completed opera were set up in four volumes (1637). In all, he prepared forty-eight separate publications, but most of them were of a controversial character, and had no relation to scholarship.1 After his long stay at Leyden, he returned to Catholic intimacies, and was received, by the Jesuits especially, with open arms. Courts and universities in Italy, Austria, and Spain poured invitations upon him; but at last he settled at Louvain, where he was made Professor of Latin without being expected to teach, and having also the appointments of privy councillor and historiographer to the King of Spain. From Louvain he sent out many clever and amusing pamphlets, writing them at the request of the Jesuit Fathers. He was indeed the scholarly champion of the Catholics, as Scaliger and Casaubon were the champions of the Protestants. Lipsius had a genial mind, and he seldom sought to wound. He even maintained a friendly personal intercourse with Protestant scholars of distinction, and with him great learning blotted out religious acrimony. He died at Louvain, leaving his Greek books and manuscripts to the college there. Lipsius had a profound knowledge of Roman antiquities, but a very slight acquaintance with Greek.

¹ Besides his Tacitus and Seneca, he edited Velleius Paterculus, and Valerius Maximus.

Even in Latin he had no ear for metres, and very little true appreciation of poetical phrasing. Yet no man ever so completely knew the Roman historians, especially Tacitus, whose pages he had begun to read as a boy, and whom he kept studying and revising until the very last year of his life.¹

Great, however, as Lipsius was, there towers above him in the history of learning the wonderful figure of Joseph Justus Scaliger,² a contemporary of Lipsius, and described by Pattison as "the most richly stored intellect which ever spent itself in acquiring knowledge." Scaliger was born of a father so remarkable as to make it surprising that even his son could surpass him. This was Julius Cæsar Scaliger.³ An eminent scholar has said that none of the ancients could be ranked above him, while the age in which he lived could not show his equal. He claimed to be one of the illustrious Italian house of La Scala, and to have been born at their princely castle on the Lago de Garda. At twelve he was presented to the Emperor Maximilian, and became one of his pages, frequently showing himself a miracle of personal bravery. He was also given to arts and letters, studying under Albrecht Dürer. In 1512 he fought at the

¹ The only complete life of Lipsius was written by Le Mire (Antwerp, 1607). See, however, Reiffenberg, De Justi Lipsi Vita et Scriptis Commentarius (Brussels, 1823), and the pages referring to him in L. Müller's Geschichte der Klassichen Philologie in den Niederlanden (Leipzig, 1869), a work which is commended to students of the Dutch-English period.

² 1540–1609. ³ 1484–1588.

battle of Ravenna, where his father and elder brother were slain beside him; but there he performed such incredible deeds of valour that the Emperor conferred upon him personally the highest tokens of chivalry,—the spurs, the collar, and the golden eagle. Receiving no more substantial rewards, he left the military service and became a student at the University of Bologna. There and elsewhere he studied as vigorously as he had fought, dividing his time between medicine, natural history, and the classics.

This autobiographical account would be of comparatively little interest had not the truth or falsehood of it played so important a part in the later life of his illustrious son, and, in fact, plunged him from the heights of glorious distinction to the depths of humiliation. As to the elder Scaliger, however, he was undoubtedly a man of unusual powers, whether he were descended from the family of La Scala (Fr. de l'Escale), or whether, as his enemies in after years declared, he was the son of an obscure teacher at Verona. This much may be said: during his life-time no one questioned his noble ancestry, while many undoubted facts verify his narrative. Certain it is that he was a brilliant classicist and spent the last thirty-two years of his life in such a way that on his death (1558) no scholar's reputation equalled his. He was essentially one of the French school with an Italian colouring, and the last part of his life was spent in France at Agen, where he fell violently in love with a beautiful young orphan of thirteen. Her

friends objected to her marriage with a person whom they called a mere adventurer; but he attacked her with as much success as he had stormed fortresses, and finally married her when she was sixteen. The marriage proved to be a very happy one; and it endured until his death, twentynine years later, signalised in those years by the birth of fifteen children. In 1531, this J. C. Scaliger published an oration against Erasmus in answer to that great scholar's Ciceronianus. It was astonishing in its vigour and command of every shade of Latin, ranging from brilliant rhetoric to foul abuse. Erasmus, however, treated it with silent contempt, which caused Scaliger to write another oration of the same sort, and a number of Latin verses, which were still less successful. From his pen came also a treatise on comic metres, and the first known scientific Latin grammar. After his death there appeared his Poetica, filled with many paradoxes and boasts that nevertheless were mingled with much acute criticism.1

Modern writers who estimate his genius regard him rather as a philosopher and man of science than as a student of the classics. His early training as a physician made him care more for physics than for literature. Hence his writings of enduring worth are monographs on many subjects relating to the physical sciences. Although Daude speaks of his intellect as "teeming with heroic thought," he was not an investigator nor one who arrived

¹ See Spingarn, op. cit., pp. 150-152, 176.

at new truths. He clung to Aristotle and to Galen, and rejected with arrogance the theories of Copernicus. Nevertheless, his philosophical *Exercitationes* on Cardan (1557) passed through many editions, and was a popular text-book as late as the middle of the seventeenth century. Even in our own times, men like Leibnitz and Sir William Hamilton have called the elder Scaliger the best modern exponent of the physics and metaphysics of Aristotle.¹

His gifted son, Joseph Justus Scaliger, has come to be recognised as the greatest scholar of the modern world. He was the tenth child of the elder Scaliger; and it was fortunate that an outbreak of the plague compelled him to remain at home for a few years, and to become his father's continual companion. This companionship was worth far more to him than instruction in any school. Association with a man of the world and an acute observer made young Scaliger much more than a mere scholar. It gave to his mind the breadth and also the accuracy, both of which a true scholar should possess. It was the chief pleasure of the elder Scaliger in his later years to write Latin verse; and daily he dictated to his son from eighty to more than a hundred lines. The boy was also compelled each day to write a Latin theme or declamation. Thus, when he was eighteen years of age, and after the

¹ See Magen, Documents sur J. C. Scaliger et sa Famille (Paris 1880).

² 1540-1609.

death of his father, he went to Paris, and spent four years at the University. His scholastic life there was very interesting. Hitherto he had known only Latin and had given no study to Greek. But at this time the French schools and universities were throbbing with the early glow of Hellenism, and the great French scholars were almost entirely bent on Hellenic studies.

This was a surprise to Scaliger. He had devoted his early youth to Latin; and now, of a sudden, he was made to feel that ignorance of Greek was ignorance of everything. Therefore, he enrolled himself under the celebrated Grecian, Turnebus (Turnèbe), and attended his lectures for several months. But presently he found out that he could learn but little Greek in this way. He could not rush into the lecture-room of a great scholar and understand the lectures that were given there. He must himself do much preliminary work. Therefore, he shut himself up in his rooms, and resolved on teaching himself. He read all Homer in twenty-one days (presumably both the Iliad and Odyssey) and then devoured all the other Greek poets, orators, and historians. As he proceeded, he formed a grammar for himself, noting the paradigms, and reducing the words to their proper order. He seemed to find this easy. Before listening to Turnebus again, he essayed to teach himself both Arabic and Hebrew, and acquired a very fair knowledge of both, though nothing

¹ Egger, op. cit., passim.

like a critical mastery. There was another teacher of Greek, named Dorat. who had the official title of "Poet Royal." He certainly justified this title, in a way, for he published more than 50,000 Greek and Latin verses, of which 15,000 are preserved. He had no great profundity as a scholar, yet he was most admirable as a teacher; while Turnebus could only lecture and not teach. The name of Doratus stood very high, and he was fortunate in his pupils, among whom was Scaliger and also Ronsard. The gratitude of those who studied under him poured itself out in their ascription to him of a high quality of scholarship. Even Scaliger who could commend him only mildly for his poetry, speaks with enthusiasm when he styles him Græcæ linguæ peritissimus. The influence of Doratus is seen in the Greek spirit of Ronsard, found in those poems of his which recall the loftiness of Æschylus.2 In Æschylus, the studies of Doratus were very fruitful, since he combined learning and taste, so that Hermann, in after years, preferred him to any other critics of the great tragic writer.

Upon the recommendation of Doratus, Scaliger became a sort of travelling companion and tutor to a young lord of La Roche Pozay, named Louis de Chastaigner. The two young men were very sympathetic and set out upon a

¹ Jean d'Aurat. His pupils named him by the Latinised form, Doratus.

² See Chalandon, Essai sur Ronsard (Paris, 1875); and Pieri, Pétrarque et Ronsard (Marseilles, 1895).

course of travel which was chronicled by Scaliger and is extremely interesting. At Rome they found the rather shifty but intensely clever Muretus, of whom Scaliger said with something of a sigh: "There are not many Muretuses in the world. If he only believed in the existence of God, as well as he can talk about it, he would be an excellent Christian." After traversing Italy they went north to England and Scotland, one of Scaliger's letters being dated at Edinburgh. Scaliger cared little for the English. He despised their "inhuman disposition" and the narrowness which made them inhospitable to foreigners. It disappointed him also to find only a few Greek manuscripts in England, and only a few scholars of the type with which he was so familiar on the Continent. Nevertheless, he was a Protestant, and for that reason his life for many years had been often trying. One pleasant restingplace he found at Valence, where lived the most profound jurist of the age, Cujacius (Jacques de Cujas).1 This wise and temperate scholar had a remarkable collection of manuscripts on the Roman law, numbering more than five hundred; and here he lived and studied with tranquillity, reconstructing the Roman jurists in a purely classic fashion, without any touch of mediævalism. For three years, Scaliger enjoyed the hospitality of Cujacius with free access to his fine library for four years.

Then the so-called massacre of St. Bartholomew led

¹ See Spangenberg, Cujacius und seine Zeitgenossen (Leipzig, 1882).

him to take refuge in Geneva, where he was received with high honour and appointed to be professor in the Academy. He lectured on both Greek and Latin authors, and gave great satisfaction to the students. But he himself hated lecturing and found the fanatical preachers of Protestantism as distasteful as the more subtle zealotes. Hence he returned to France (1574) and lived for the next twenty years in the various castles of his friend, La Roche Pozay. Much of his life was far different from that of a tranquil scholar. The Huguenots and the Leaguers with their outbreaks of violence often compelled Scaliger to move from one château to another, going on guard duty, taking part in military expeditions in the night-time, and wielding pike and dagger like any other freebooter. 1 He had, however, for at least half the time, a chance to give himself up to study and composition; and his editions of the Catalecta (1574), of Festus (1576) of Catullus, Tibullus, and Propertius (1577) are remarkable examples of true criticism, disdaining the prevalent happy-go-lucky guesswork for a fixed and ordered system of scientific scholarship.

In 1590, the great Lipsius retired from Leyden, where for twelve years he had been professor of Roman History and Antiquities. Leyden was then the fortress of Protes-

¹ Our knowledge of Scaliger's life at this time is derived from a number of letters in *Lettres Françaises Inédites de Joseph Scaliger*, discovered at Agen by M. de Larroque, and published there by him in 1881.

tant learning, as Paris was the fortress of Catholic scholarship. And so, when Leyden saw its most famous scholar retire, it sought out Scaliger as his successor. In this, the University and also the States-General and the Prince of Orange gave their aid, and the Prince wrote a personal letter both to Henry IV of France and to Scaliger himself, asking that the latter might accept a chair in the University. Scaliger had hoped that Henry IV would, when successful, give freedom of speech and thought to Protestants. Moreover, Scaliger hated to lecture, and much preferred the quiet of his study, and the learned intercourse of distinguished men. The drudgery of the University made no appeal to him; the spirit of learning was all in all. Consequently he refused; but when the invitation was renewed in the most flattering manner at the end of another year, he felt that he would do wrong to remain in France, subject to the sneers and hidden innuendoes of the once Huguenot King. This second call from Leyden was accepted by Scaliger, and he was welcomed there with honours such as are given not only to princes of learning, but, likewise, to men of princely blood, as Scaliger believed himself to be. He dined at the table of Prince Maurice. The burghers at Leyden deemed his presence among them a glory to the town, and even the children louted low before him, when he took his walks abroad. Very different, indeed, was his lot as compared with that of poor Casaubon in England, who was hustled by British

boors and his windows broken by the rabble in the street. Scaliger was in reality a prince of learning, and perhaps he should have been quite content with this. That he deemed himself the scion of a princely Italian family was not his fault, and to this day no one is certain of the facts. Yet this conviction which he inherited from his father, and which had never been questioned in his father's lifetime, was fated to destroy his happiness, and end his wonderful labours. The story is worth relating in some detail, because it illustrates the evil effects of the religious feuds which had broken out with the so-called Protestant Reformation.¹

As was said before, the services of distinguished scholars were employed alike by the Old Church and the New in the way of theological sharp-shooting. Thus we have seen that Casaubon died while completing his attack upon Cardinal Baronius. He had himself been made the victim of a stream of vile abuse from a Cretan Catholic (Eudamon-Ioannes) who attacked him in a pamphlet.

Yet a much more skilful shaft was launched against him by one Gaspar Scioppius (Gaspar Schoppe). This man, who flitted back and forth between Madrid and Ingolstadt, was a really remarkable figure. He had been disappointed in many of his hopes, and he became a savage,

¹ See Pattison, *Isaac Casaubon*, pp. 389–400 (Oxford, 1892); and *id*. *Essays*, ed. by Nettleship, i. pp. 132–192 (Oxford, 1889).

venomous creature ready to attack any one whom his Catholic masters pointed out to him. Unlike many of the literary bravos of the time, he was an accomplished Latinist, and was almost monstrous in his shameless ingenuity and audacious use of fiction. He had already scourged King James of England in two pamphlets. "Now," said he, "I am going to flay the King of England's dog." This he did in his *Holofernes*. It was an atrocious libel from beginning to end; yet it was piquant, and when decent, it was witty. But when he went on to charge Casaubon with every sort of unnatural crime and to support the charges by imaginary stories that had no basis, his fierce assault was neither plausible nor probable. Casaubon was too austere and virtuous a man for such insults to have any effect whatever.

Thus, only to a certain extent, the virulent libel against Casaubon did slight harm. Nor was Casaubon, although he was one of the Triumvirate, so conspicuous a figure as Scaliger, who remained at the very pinnacle of sixteenth and seventeenth century scholarship. Unfortunately, his enemies found a flaw in his otherwise impenetrable armour. In 1594, he published a sort of glorification of his family, Epistola de Vetustate et Splendore Gentis Scaligeræ et J. C. Scaligeri Vita. This was really an exhibition of filial love, though there runs through it a vein of proud, and, one might even say, of noble self-appreciation. But it showed, nevertheless, a weak point in his nature, and

one which his enemies at Ingolstadt assailed alike with every means that could wound so proud a spirit. Again and again he had been attacked; but he cared nothing for coarse and violent scribblers. In 1607, however, there entered the arena a foeman, vastly inferior to Scaliger in learning, but the peer of any one in wit, in all the artifices of debate, with a marvellous command of style, and wielding all the powers of sarcasm, in which he had no rival. Mark Pattison says: "Every piece of gossip or scandal which could be raked together respecting Scaliger or his family "was put at the disposal of Scioppius. With these gifts and with this material, Scioppius said, "I shall kill Scaliger!" and soon after launched a volume of some four hundred pages written with consummate ability so that "no stronger proof can be given of the impression produced by this powerful philippic, dedicated to the defamation of an individual, than that it has been the source from which the biography of Scaliger as it now stands in our biographical collections has mainly flowed." The book was called Scaliger Hypolinaus ("The Supposititious Scaliger"), and it simply crushed the haughty Triumvir, as well it might. For he had always believed in good faith that he was a prince of Verona, and he had written a great many things which he had heard from his father, and which he believed to be true. But as a matter of fact, whether or not Julius Cæsar Scaliger was descended from a princely family he was certainly a good

deal of a romancer, and it was not difficult for so malicious and so clever an antagonist as Scioppius to show the blunders and errors of fact which had crept into the younger Scaliger's Epistola. Around these errors and around other statements which were claimed to be erroneous, Scioppius danced and jeered with outrageous glee. As soon as Scaliger could rally from the unexpected attack, he wrote a reply to Scioppius which he called Confutatio Fabulæ Burdonum. This title refers to Benedetto Bordone, a person of humble birth and said by Scioppius to be the real father of the elder Scaliger. This would have made both Scaligers little less than impostors, and, therefore, in the reply the falsity of the charge was attacked, though with moderation and good taste. The Confutatio, however, does not bring forward a single convincing proof either of his father's descent from the family of La Scala, or of any event narrated by Julius as having happened to himself or to any of his family before he arrived at Agen in France. The success of Scioppius was remarkable. The product of his almost devilish ingenuity was read all over Europe, and it was generally believed even by many who had passed for friends. Scaliger was too great, too learned, too much of a real prince in intellect and bearing, for these petty, jealous creatures to be otherwise than pleased at his overthrow. The name of the greatest man in Europe now evoked merely a grin, or a coarse joke. His very name was used as a synonym for a pedant (pédant),

while in French literature, especially, his memory has been covered with unworthy ridicule.¹

So much for the chief incidents of his life and death. One recounts them because they are characteristic of the time in which he lived, and of the continual warfare between literary ruffians and their betters. We must now return to an account of the great achievements which placed Scaliger at the very head of all men of letters and learning, from Varro to Mommsen. Having shown by his edited works, already mentioned,² that he could criticise and amend according to a scientific system, he now moved on to a higher field than that of scholarship alone.

"It was reserved for his edition of *Manilius* (1579), and his *De Emendatione Temporum* (1583), to revolutionize all the received ideas of the chronology of ancient history,— to show for the first time that ancient chronology was of the highest importance as a corrector as well as a supplement to historical narrative, that

¹ The most adequate biography of Joseph Scaliger is that of Jacob Bernays (Berlin, 1865). See also the essay by Mark Pattison in his book of essays, already mentioned. For the life of the elder Scaliger, the letters edited by his son, those afterwards published in 1620, and his own writings, are the principal authorities. See also Laffore's Étude sur Julius César de Lescale (Agen, 1860) and Magen's Documents sur Julius Cæsar Scaliger et sa Famille (Agen, 1873). The two books by Ch. Nisard — Les Gladiateurs de la République des Lettres (Paris, 1889), and Le Triumvirat Litteraire au Seizième Siècle (Paris) — are written with levity. The second of the two is little more than a digest of the volume by Scioppius; yet perhaps this makes it worth the reader's while. There is an excellent account of the two Scaligers by Sir R. C. Jebb in the Encyclopædia Britannica, 9th ed., vol. xx, pp. 361–365 (New York, 1886).

² Supra, pp. 334-340.

ancient history is not confined to that of the Greeks and Romans, but also comprises that of the Persians, the Babylonians, and the Egyptians, hitherto neglected as absolutely worthless, and that of the Jews, hitherto treated as a thing apart and too sacred to be mixed up with the others, and that the historical narratives and fragments of each of these, and their several systems of chronology, must be carefully and critically compared together, if any true and general conclusions on ancient history are to be arrived at. It is this which constitutes his true glory, and which places Scaliger on so immensely higher an eminence than any of his contemporaries. Yet, while the scholars of his time admitted his pre-eminence, neither they nor those who immediately followed seem to have appreciated his real merit, but to have considered his emendatory criticism, and his skill in Greek, as constituting his claim to special greatness. 'Scaliger's great works in historical criticism had overstepped any power of appreciation which the succeeding age possessed ' (Pattison). His commentary on Manilius is really a treatise on the astronomy of the ancients, and it forms an introduction to the De Emendatione Temporum, in which he examines by the light of modern and Copernican science the ancient system as applied to epochs, calendars, and computations of time, showing upon what principles they were based."

His Manilius, while it represented a new field of labour, had puzzled and frightened away the smaller critics as being the most difficult of all the Latin classics. But this work, with him, merely served as an introduction to a comprehensive chronological system to which he gave the

¹ The author of a Latin poem upon astronomy written in five books between 9 A.D. and 15 A.D. A proposed sixth book was never written. The first satisfactory text was that of J. J. Scaliger (1579). Late editions are by Bentley (London, 1739), and Jacob (Berlin, 1846). See Kramer, De Manilii Astronomicis (Marburg, 1890).

name De Emendatione Temporum. In this latter effort of a great genius Scaliger created a science of Chronology. Heretofore, historians had merely arranged past facts in a tabular series to help the memory. On the one hand, the philologists know nothing of the mathematical principles upon which the calculation of period rests. On the other hand, the astronomers had not attempted to apply their principles to the records of ancient time. It was Scaliger who now, with a new light which Copernicus and Tycho Brahe gave him, turned back to the ancient epochs and systems and made it plain on what principles they had been formed. He instituted an acute comparison between the Greek and Persian methods of reckoning time; he studied even the Hebrew calendar, and then in ascending to primitive ages, he saw how chronology may become an instrument of discovery for times when written records do not exist. This suggestion is only a hint in the first edition of the De Emendatione. It proved fruitful to him until he grasped the daring idea of compiling a book which should embrace the records of the prehistoric past. Scaliger was the first to see that the history of the ancient world, if it could be known at all, could be known only as an entity; and that the facts of this remote period could be had only in the remains of those chronologers who, in copying statements which they often failed to

¹ The first edition published in 1583, followed by many other and fuller editions.

understand themselves, did transmit in this way to future ages the universal tradition of the human species. The distorted fragments of Berosus, Menander, Manetho, and Abydenus were first to be collected. Finally, he adopted as a basis of primitive tradition, St. Jerome's Latin translation of the so-called Eusebian Chronicle.

It is necessary to explain in a few words what this Eusebian Chronicle was which gave the study of it so much importance. Eusebius was an Asiatic Greek, a friend of the Emperor Constantine, and born in Palestine in the middle of the third century A.D. He was one of the most learned scholars of the time and the most widely read. A list of his books would be unnecessary here, but all his studies were of a nature which intended toward the discovery of religious truth. He was familiar with a great variety of Greek authors, philosophers, historians, theologians, who lived in Egypt or Phœnicia or Asia and Europe. More than anything else he cultivated a study of chronology with a view to establishing on a solid basis the historical value of the Old Testament. This was practically a universal history ($\Pi a \nu \tau o \delta a \pi \dot{\eta}$ ' $I \sigma \tau o \rho i a$) divided into two books. The first book discussed the origin and the history of all nations from the creation of the world down to the year 325 A.D. Here Eusebius uses copious extracts from historians whose works are now lost. The second part, entitled "The Chronicle Canon" (Χρονικὸς Κανών), consisted of parallel tables given by

periods of ten years each, containing the names of the sovereigns and the principal events which had taken place from the call of Abraham (2017 B.C.). He had drawn largely upon the chronography of Sextus Iulius Africanus, completing the whole by the aid of Manetho, Iosephus, and other historians. This was the famous chronicle which he continued down to his own time. The book was widely read and was accepted as necessarily accurate. In course of time, after the death of Eusebius, St. Jerome translated the Chronicle into Latin, continuing it to 378 A.D. For some centuries, the Christian scribes preserved it as an essential part of the works of St. Jerome, although they had no idea of its unusual value. When the Renaissance was well under way, neither the men of elegant letters, nor the Protestant controversialists, knew what to make of it, and at last it was omitted from their editions of St. Jerome's works as being without value. Even the great Erasmus, though he edited the other writings of Jerome, did not think it worth his while to include this Chronicle. and in fact, it was not replaced in the series of his works until 1734.1

It was left for Scaliger to appreciate the inestimable value of this document, which contains all that we know of a great deal of pre-classical history, carrying us back to the oriental countries as well as to Greece and Rome.

¹ This was a handsomely printed edition published at Verona, but very uncritically edited.

To edit and explain so complicated a work as this was a task fit for an intellectual giant like Scaliger. The substance of the Chronicle was tempting to one whose tastes were annalistic; while the form in which it had come down was peculiarly attractive to a mind like Scaliger's. A careful examination of it led him to doubt whether this was, in fact, an original document composed by St. Jerome, or whether it was the Latin version of a Greek original which had perished. The next point which he considered was this: Since we have not the Greek original, is the Latin translation a faithful version of what Eusebius set down? In the first place, all translators are liable to various defects, and in the Chronicle there was a greater chance of error because the work was written with such speed. St. Jerome himself calls it tumultuarium opus and asks for lenity from his readers. Again Terome did not write the book, but merely used it to supply the Latin world with a manual of general history. He omitted and inserted whenever he thought the book would be improved, and tried to communicate the elements of universal history in countries where barbarous hordes were overrunning the civilisation of Christianity. Furthermore, the manuscripts were peculiarly corrupt, as was natural in a book so full of dates.

Pondering over these facts, Scaliger came to believe that the original Chronicle as written by Eusebius had consisted of two books; and that the first of these books had

been lost in the Dark Ages. The second book had been preserved for its utility as an epitome of ancient history, while the first book as consisting of extracts from the Greek historians, for moderns was the lost book that was the most valuable. It would daunt the boldest textcritic of modern times to arrive at these conclusions from the slight indications which Scaliger had at hand. Even more reckless did it seem for him to reproduce a second book of the Chronicle of which he had only St. Jerome's Latin, in its original language. But finally Scaliger's almost miraculous mind attempted to recover the first book both in its substance and language. No such remarkable attempt had ever before or has ever since been known in the annals of criticism. What Scaliger relied upon was his skill in imitative translation, and his mastery of the whole remains of Greek literature. How ingenious was he in detecting the smallest scrap of Eusebius may be shown by one slight incident. A few fragments of the original Chronicle had been recovered and fitted into their places by the skill of Scaliger; but these would have been of little use. In 1601 he came upon the vestiges of a manuscript chronicle by a Greek priest which possibly contained Eusebian fragments, and which by deduction was likely to be found in the Royal Library at Paris. It turned out that the manuscript was found there. Scaliger at Leyden in an agony of mingled anxiety and exultation, wrote letter after letter, and after a year's siege secured

the manuscript over which he gloated, and presently declared that this single writer was more to his purpose than all the other Greek writers combined. It was, indeed, another chronicle which had been compiled by Georgius Syncellus at Constantinople soon after the year 900. To this chronicle the Greek monk had transferred almost the whole of Eusebius, together with additions of his own. The second book of Eusebius, therefore, — the only part that any one was sure of, — was published at last in 1606, as part of a folio, Thesaurus Temporum, in which every chronological relic in Greek or Latin was restored, placed in order, and made clear. This was an immense triumph for Scaliger. It placed him at the very head of all critics and chronologists from that time forever, since he had performed an achievement not to be paralleled. Many scholars, however, who admired his genius regarded his theory about a first book of Eusebius as fanciful. Could he have lived beyond the life of ordinary man, he would have witnessed a triumph even greater than his first. In the next century, while the Veronese edition of St. Jerome was passing through the press under the direction of Dominico Vallarsi, a complete Eusebius in an Armenian translation (a manuscript of the twelfth century) was slowly making its way to Italy, and was at last published (1818) in the Armenian Convent at Venice. Then it was shown that Scaliger's wonderful divination had rightly guided him; that there was a first book to the Chronicle; that St. Jerome had translated only the second book; and that many of the omissions that he had charged against St. Jerome were actual omissions.

This remarkable discovery placed Scaliger indisputably above the heads of all his contemporaries. It was his great eminence which led the vile-minded Scioppius to assail him at a point which had nothing to do with either scholarship or morals. It is not surprising, however, that many who admired his genius were not friendly toward the man himself. His learning was so great as to make that of other men seem frivolous and slight, especially if they were men of his own age or older. His gravity might be called austere. His thoughts were settled almost wholly on his learning. He had a manner which was unfortunate, and it made him seem supercilious. For these reasons many persons disliked him, and many more actually hated him, besides those who were jealous of his great learning. Thus it was that the lampoon of Scioppius had more than a temporary effect. In France and Germany and Italy, and even England, the name of Scaliger was derided. He was thought of mainly as a mere pedant, a butt for cheap wit, and one who might readily be fleered at with reason. Thus, M. Charles Nisard in his two entertaining but trifling volumes 1 displayed the opinions which have long been held of Scaliger in France. It was Pro-

¹ Nisard, Les Gladiateurs de la République de Lettres (Paris, 1889); and Le Triumvirat Littéraire au Seizième Siècle (Paris, no date).

fessor Jacob Bernays who, in 1855, revived the glory of Scaliger and made his name as illustrious as it had been two centuries before; and it was Mark Pattison who aided very greatly in this honourable task.¹ It is they who recall to us, not merely the advance which Scaliger made in scientific chronology, and likewise in constructive criticism, but that he had also helped on the study of Numismatics by his treatise *De Re Nummaria* (1616). To him are due, also, twenty-four indexes to Gruter's *Thesaurus Inscriptionum Latinarum* ² (1603).

The death of Scaliger served only to stimulate the scholarly activities of the Netherlanders and Flemings, among whom we find, to be sure, no such mighty names as those of the Triumvirate, but many which have a peculiar significance because of some special incident or achievement. Thus Jacques de Cruques (Latinised as Cruquius) will remain forever famous because in the Abbey at Blankenberghe he discovered a number of different manuscripts of Horace with scholia (1578). Among these manuscripts was the famous Codex Blandinianus, possibly the oldest (vetustissimus). Unfortunately, an attack by a

¹ Bernays, *Joseph Justus Scaliger* (Berlin, 1855); and Pattison, *Essays*, i. pp. 162–171 (Oxford, 1889).

² Janus Gruter (Jan Gruytère) was a classical scholar who studied in Cambridge and Leyden, and taught in Wittenberg and in Heidelberg. He was in Heidelberg keeper of the famous Palatine Library, which was presently carried to Rome. He edited a number of classical authors, but is best known for his collection of inscriptions, which was, however, most valuable from the indexes mentioned above.

mob upon the Abbey led to the destruction of this invaluable manuscript, so that we have now only the notes and excerpts of Cruquius. It is certain that they are of the greatest interest to Horatians, although some have endeavoured to repudiate them as either inventions or as inaccurately written out by Cruquius. Nevertheless, there are some lines which are almost certainly genuine, and they explain lines existing in other manuscripts, which had hitherto been almost meaningless.1 Another contemporary scholar was William Canter, a well-known Greek critic of Utrecht, who had studied in Paris and edited Euripides (1571) in a fashion which made the distinction between strophe and antistrophe by Arabic numerals in the margins. He also edited Sophocles (1579) and Æschylus (1580). Later in the century is Gerhard Johannes Vossius, who taught at Leyden and afterwards in Amsterdam. He gave patient study to the syntax of Latin as well as to its etymology, writing five treatises on these subjects; and, like Scaliger, another Ars Poetica. He is best to be remembered, however, by two treatises which, taken together, form an important contribution to the history of ancient literature. The first is entitled De Historicis Græcis (1623-4) and De Historicis Latinis (1627). All of his books were widely read

¹ As to eminent scholars who doubt the accuracy of the Codex Blandinianus and even the veracity of Cruquius, the reader is referred to Keller's *Epilegomena zu Horaz* (Leipzig, 1879), accompanying a new recension of Keller and Holder's first edition (Leipzig, 1870) — a remarkable piece of critical work, though not convincing.

and studied, and a new edition of the former was printed at Leipzig in 1833. His interest in everything classical was very wide. He wrote a monograph on art (De Graphice) and in modern times he is the author of a very early treatise on Mythology (De Theologia Gentili). His brother-in-law, Franciscus Junius, who spent thirty years of his life in England as librarian to Earl of Arundel, made a special study of ancient paintings and published a volume De Pictura Veterum (1637). Daniel Heinsius (1581–1639) was the beloved pupil of Scaliger, and in his arms that great scholar died. Heinsius was a multifarious editor of classical books, though hardly worthy to rank with most of his contemporaries.

When Scaliger died in 1609 the chair of history, which was thus vacated, was left without an occupant for twenty-two years, although a very worthy successor would have been Vossius, who was widely known by his historical writings on ancient history. The chair was not filled, however, until 1631, and then by a foreigner, Claude de Saumaise (Salmasius), — a brilliant figure among the sturdy Hollanders, and one who attracted admiration, both for his personality and for his varied learning. In 1606 he had discovered the older Anthology by Cephalas in the Palatine Library at Heidelberg. The influence there probably induced him to become a Protestant, which was, indeed, the religion of his mother. In 1609 he attempted successfully a genuine feat of scholarship, in editing Florus, with notes,

which he compiled within ten days. In the next year he returned to France, studying jurisprudence but receiving no office because of his religion. He was, however, devoted to the classics, and when, in 1620, he published Casaubon's notes on the Historia Augusta, he made so many acute and brilliant additions of his own as to render his name illustrious. His Protestantism was evinced when he married Anne Mercier, a Huguenot of distinguished family, and he reached the height of his fame by his commentary on the Polyhistor of Solinus (1629), a work that still remains a proof of extraordinary and conscientious industry. So anxious was Salmasius to attain complete accuracy that he learned Arabic to help him in the botanical part of his work; and he was so unwilling to let his book go to press until he should have consulted a rare treatise by Didymus that the third section of his commentary (De Herbis et Plantis) did not appear until after his death. Salmasius was at once a scholar of high rank, and a gentleman of polished manners — a genuine cavalier. It was natural that he should have received urgent calls from Oxford, Padua, and Bologna. All of these he declined. But in 1631 the University of Leyden presented him with a research professorship and a stipend of two thousand livres a year, a sum which was soon raised to three thousand. The only thing required of him was that he should live in Leyden, and refute the annals of Baronius. He fulfilled the former

¹ Supra, p. 309 n.

condition, but conveniently forgot the second. He was very prolific, however, in tracts and monographs, most of them classical. In spite of his Protestantism, and his attacks upon the papal power, Salmasius was popular in France, and the scholars of Paris evidently hoped that he would change his faith and return to them. He was, indeed, made a royal counsellor and a Knight of St. Michael, and great sums of money were offered him; but while he accepted the honours, he refused the money and remained faithful to his religion.

Salmasius is now best remembered by his Defensio Regia pro Carolo I, which he wrote in defence of Charles I of England and of absolute monarchy. It is remembered because it drew forth from Milton a virulent answer. Many have said that Milton overwhelmed Salmasius in this controversy; but such an opinion is due to the partiality given by English-speaking people to Milton, in this as in other things. The truth is that the Defensio, being written by one Protestant against another, was very widely read and had considerable influence. Charles II paid the cost of printing and gave the author a hundred pounds. Oueen Christina of Sweden invited Salmasius to visit her at her court, and loaded him with gifts and other distinc-The first edition of his Defensio was anonymous. A French translation appeared at once under the name of Le Gros and was also the work of Salmasius. It must be said that neither Milton nor Salmasius showed his full powers in this famous controversy. Milton allowed himself too much vituperation and vile language, while Salmasius was not sufficiently carried away by his subject to give his words the ringing force of truth.

Nevertheless, Salmasius was gladly welcomed back to Leyden, where he died soon after, in 1653. He had by his great powers made himself a literary dictator, and we must ascribe this to his vast erudition, his natural good sense, his keen perception of an author's meaning, all of which make his text corrections often ingenious and frequently most felicitous. He was, moreover, neither a sour Puritan nor a dissolute cavalier; but liberal, generous, and wise, and exercising a fortitude that enabled him to combat ill health, and yet produce books to the number of eighty, every one of which had a distinct value.

Contemporary with Salmasius and Vossius, and likewise a great pillar of Dutch scholarship, was Hugo Grotius (in his native tongue called Huig van Groot), one of those ancient scholars and writers who, like Plato and Thucydides, and Cæsar and Sallust, was a man of action and thought as well as literary distinction. He served his State as well as raised the reputation of his country for scholarship. Young Grotius was able to write good Latin verses at the age of nine. He entered the University of Leyden at twelve. Three years later he began an edition of the encyclopædia of Martianus Capella. In fact, he was a great favourite of Joseph Scaliger, who urged him

to edit this educational allegory. After travelling on the Continent, he took the degree of doctor of laws at Leyden, and entered on actual practice as an advocate. He was successful in his profession, and yet he could not put aside the classics. His Latin style was so pure that he was even read in the schools side by side with Terence, just as Muretus in France had been read side by side with Cicero. Apart from his text editions, however, he wrought out two great works which show how he was divided in his studies between the classics, pure and simple, and juristic science. The first is his extraordinary treatise on the principles of jurisprudence as relating to combatants. He went, however, much farther than this, and opened many larger questions which were subsequently to be developed by those who looked upon Grotius as a master. Thus, for example, he was the first to attempt to formulate a principle of right, as a basis for society and government, outside the Church or the Bible. His treatise De Iure Belli et Pacis 2 marks an epoch in the science of law. It is worth noting that even in this work one is struck by the beauty of his Latin style, and the glimpses of half-forgotten pearls with which he consciously adorned his pages.

The other remarkable work which he accomplished was

¹ Of Martianus Capella, the *Pharsalia*, and Silius Italicus.

² Published at Paris in 1625. A French translation was long afterward made by Hély (Paris, 1875).

his translation into Latin verse of the Anthologia Planudea.¹ This was the first and best translation of these poems, so varied, so sparkling with wit, and again so full of a pervasive tenderness as to make it seem impossible that a grave jurisconsult who had passed his fiftieth year could turn from his legal studies to attempt so difficult a task as this. But having attempted it, he succeeded, and his flowers of elegance and grace lose little or nothing by the artful way in which he has transformed them from Greek to Latin. Not for more than one hundred and fifty years was any serious rivalry with Grotius attempted; and then its preparation occupied Van Bosch and Van Lennep for seven years.²

With Grotius³ ends the earlier type of Netherlandish scholar. For a time, there are no giants to be noted in the universities of Holland. There is much making of texts, as by the two Gronovii,⁴ the second of whom compiled in thirteen volumes an immense *Thesaurus Antiquitatum Græcarum*; ⁵ Nicolaus Heinsius, the son of Scaliger's disciple Daniel Heinsius; and also J. G. Grævius (Greffe), who capped the *Thesaurus* of Heinsius by publishing three *thesauri*, containing in all thirteen volumes, relating to antiquarian topics.

¹ Supra, pp. 256, 257.

² Utrecht, 1795-1822.

³ See de Vries, Hugo Grotius (Amst., 1827).

⁴ J. F. Gronov (1611-1671) and Jacob Gronov (1645-1716).

⁵ Published in 1702.

The study of ancient coins was taken up by Ezechiel Spanheim, whose life represents the union of the Protestant countries, since he was born in Geneva, educated in Leyden, and died in London: Besides his Dissertatio he wrote a famous commentary on the Hymns of Callimachus, which is still valuable in the edition of Ernesti (1761). Spanheim was an industrious, though not an inspired, scholar, so that Wyttenbach said of him: "Spanheimius multa, non multum, legerat."

The two Peter Burmanns (Burmanni) revived the old supremacy of Holland in letters. The elder was a student of Grævius, but spent the last twenty-six years of his life as Professor of Eloquence at Leyden. He was a voluminous editor, confining himself, however, to the Latin writers both in prose and poetry, for which he has been much blamed by the Grecians. The most notable are his editions of the Poetæ Latini Minores, and of Petronius in prose. His editions were largely Variorum editions, and many of them are dull; though sometimes when his prejudices were aroused, he became so scurrilous that his introductions could not be printed during his lifetime. So laborious was he, and so patient, that he was called by many "the beast of burden" (Burdomanus) of classical learning. Students of the history of scholar-

¹ 1629~1710.

² Dissertatio de Usu et Præstantia Numismatum Antiquorum (1664).

^{* 1668-1741}**.**

ship in the Netherlands will, however, continue to read the huge quarto volumes of his Sylloge Epistolarum a Viris Illustribus Scriptarum, which contains material of great value relating to classicists.¹

Just as Burmann devoted his whole life to Latin studies, so the German, Ludolf Küster (Neocorus)² represented the investigation of Greek. Küster was a German by birth, but something of a cosmopolite, since he visited Utrecht, Paris, and Cambridge, then lived for a long time at Rotterdam, and died in Paris. He wrote (1696) a critical history of Homer, and in 1705 an edition of Suidas in three large volumes, published by the Cambridge Press. He then busied himself on a life of Pythagoras (1707) and followed it up with a massive edition of Aristophanes, including all the Greek scholia, with a metrical version parallel to the text. He included also at the end of the volume all the modern comments, besides many notes sent by the great English classicist, Richard Bentley.³

The number of famous Dutch scholars who flourished in the seventeenth and eighteenth centuries is notable beyond those whom we have already mentioned. Thus, Lambert Bos, the contemporary of Küster, studied Greek grammar with much care at Francker; and there was also the great edition of Livy by Arnold Drakenborch. This was originally in seven quarto volumes (1738–1746).

¹ See L. Müller, op. cit., pp. 54-59.

³ Infra, pp. 361-371.

^{2 1670-1716.}

^{4 1670-1717.}

His contemporary, Siegbert Havercamp, Professor at Leyden, edited Lucretius in two large volumes, full of errors. He was careless in neglecting the value of what lay nearest at hand, *i.e.* the Leyden manuscripts. He collected a number of tracts on the pronunciation of Greek, and it was this collection which probably led to the appointment of Havercamp as Professor of Greek at Leyden.

This honour should have been given, as is now plainly seen, to Tiberius Hemsterhuys, educated at Groningen and Leyden. At the latter university, when a mere youth, he was placed in charge of the public library, and at nineteen was called to the chair of mathematics at the Athenæum at Amsterdam (1704). His acute criticism of classical authors who were then being edited by the different professors led him to a distinction which was to become very great. I. H. Lederlin, who had been engaged to edit Tulius Pollux, threw up his engagement, and departed suddenly for Strassburg, where a professorship had been offered him. The remaining three books of the work were assigned to Hemsterhuys, who, with natural modesty, wrote to Bentley, and begged for his opinion on ten passages in the last two books. Bentley's prompt answer to all these questions, thrown off at once in a letter that fills three pages of print, is a remarkable proof of his versatility and ready scholarship.2

¹ 1685-1766.

² Still more striking was another incident connected with this book. When Bentley received the first edition, he wrote back in words of high

Later, this eminent Greek scholar began to edit the whole of Lucian, the minuteness of which can be judged by the fact that in ten years he had only translated and elucidated six of the texts. At that stage, however, the printing began, but proceeded slowly. The publisher, wishing to see the work completed during his own lifetime, the remaining five-sixths were given over to one J. F. Reitz¹ of Utrecht, who finished them in five years. Hemsterhuys, likewise, did much text criticism in the editions of other men, correcting mistakes and emending doubtful passages. Meanwhile, he had been advanced to a professorship at the University of Harderwyk. Much to the disappointment of friends of learning, Hemsterhuys did not succeed Gronovius at Leyden, though he became professor at Francker. Finally, however, in 1740, two years before the death of Havercamp, he received the

praise, but regretted that so learned a scholar as Hemsterhuys should have dealt carelessly with the metrical quotations in Pollux. Bentley, thereupon, proceeds to make the necessary corrections, and does so with such ease and fluency and fulness as would astonish the ripest scholar. They did, indeed, bring gall and wormwood to young Hemsterhuys. He had been well aware of the importance of these quotations, and had endeavoured with all his skill to rectify them. Hence Bentley's easy mastery of the subject seemed maddening to Hemsterhuys who was so distressed, that he resolved to give up Greek forever; and for several months did actually not allow himself to open a Greek book.

¹ Reitz (1695-1778) was head master of the local school at Utrecht. It was in this position that he assisted Hemsterhuys; but later for a period of thirty years he was Professor of History and Eloquence in the University.

Professorship of Greek in Leyden, where he revived Hellenic studies so successfully that scholars from other lands flocked to hear him, while he was joined by his most famous pupil, David Ruhnken.¹ Ruhnken had been studying Greek at Wittenberg; but so famous was Hemsterhuys, that even in the German universities students were advised to seek the Netherlands for the best instruction in the Hellenic literature and language. Such renown had sprung from the arduous and brilliant labours of Hemsterhuys, Oudendorp, L. K. Valckenaer, Peter Wesseling, and one of the foreign contingent, Jacques Philippe d'Orville, whose studies were made entirely in the Netherlands. There had been, indeed, a sort of rivalry between the Grecians and the Latinists at Leyden, and the other great Dutch universities.

For a time Latin was regarded as the chief of the classics, while Greek was, as it were, an oriental tongue to be grouped with Arabic and Hebrew. But Hemsterhuys and his colleague had taken Greek out of this unnatural position, and had taught it and its great importance, with brilliant effort and complete success. On the other hand, Latin for a time had become a sort of stamping ground for dullards, until Franz van Oudendorp² became a professor at Leyden, with the result that Greek and Latin were each represented by a man of stimulating power. Oudendorp's Lucan, his editions of Cæsar;

^{1 1723-1798.}

Suetonius, and Apuleius were excellent specimens of exegetical work.

The Anglo-Dutch Period. — It has been said that the Protestant countries in the North had, by a natural sympathy, gradually been drawing together after the outbreak of Protestantism. But although the very early English scholars whom we have mentioned as flourishing in Ireland and in the abbeys were in close contact with the schools of France and the splendid Italian seats of learning, not so much can be said for the Englishmen of the seventeenth century. They had, however, a certain full-bodied enjoyment of the pagan side of classicism. They were not averse to the songs of the Goliardi; and, as a matter of pride, they patronised learning at Oxford and Cambridge and some of the public schools.

We have already seen that many young Englishmen came to the Netherlands to study for a while, and the Netherlands were a source of English classical learning. A good type of these cultivated Englishmen was Sir Henry Savile, an Oxford man, who was tutor in Greek to Queen Elizabeth. Savile was a wealthy, high-spirited man, of much learning, although his learning was of a serious and painstaking sort. He translated four books of Tacitus, the *Historiæ* and also the *Agricola*. Furthermore, he wrote an *excursus* on the military usages of the Romans—a pamphlet which was translated into

¹ 1540-1622.

Latin at Heidelberg in 1601. Later he became Provost at Eton, and there he introduced a stern and austere discipline. He was one of those who were associated in preparing the authorised version of the Bible, and was knighted by James I.

Sir Henry endeavoured, as a work by which he should be remembered, to prepare a great edition of St. Chrysostom. He secured manuscript collections from Paris, but could not get a font of the royal type; whereupon, Savile bought a special font, employed the King's printer, and oversaw the actual printing of the eight folio volumes which were done at Eton at a cost of £8000, the paper alone costing £2000. Casaubon, who was in England while this work was going on, describes it accurately as produced privata impensa, animo regio. No masterpiece of English scholarship had heretofore been so splendidly executed and evinced such breadth of erudition joined with lavishness of outlay. Savile was, indeed, a fitting type of the magnificent English scholar of the early school. Free-handed in gratifying his scholarly tastes, his generosity was felt all over England. He collected manuscripts, patronised other scholars; founded professorships at Oxford, and aided Bodley in founding the famous Bodleian Library.

Apart from his love of scholarship, Savile was, likewise, chivalrous in manner, and somewhat affected in his speech. He regarded himself as "an extraordinarily handsome

man, no lady having a finer complexion." His appreciation of himself is commemorated by a portrait at Oxford, another at Eton, and by sculptured monuments at Merton College, Oxford, and at Eton. Associates of Savile were Andrew Downes,¹ one of the revisers of the King James version of the Bible; but so fond was he of his haunts at Cambridge that he is said never to have attended the meetings of the revisers "till he was either fetched or threatened with a Pursivant." He was especially noted for his knowledge of Greek, and it is described by Fuller as "composed of Greek and industry."

Francis Bacon, Lord Verulam,² entered Trinity College, Cambridge, at the age of twelve; and as a student he is said to have browsed chiefly among Cicero, Livy, Sallust, and Cæsar in Latin; and in Greek among Homer, Xenophon, Plato, and Aristotle. Later he came to care little for Aristotle, while his attitude toward ancient philosophy is given in a sentence by Lord Macaulay: "Two words form the key of Baconian philosophy — utility, and progress." Bacon is unique because he regretted that there was a noticeable absence of any history of learning. Most striking is the famous Novum Organum (1620), which, by its title, declares the author to enter the philosophic field against the logical doctrine of Aristotle. As Aristotle thought that learning should be useful and, therefore, content to be stationary, Bacon proceeds to develop

¹ 1549-1628.

² 1561–1629.

a system which shall be fruitful, and given to the development of new learning.¹

There remain in this earlier period Ludwig Caspar Valckenaer, a professor in Leyden who made rather noticeable editions of the Hippolytus and Phanissa of Euripides, and sundry editions of: (1) The Bucolic Poets, (2) The Fragments of Callimachus, (3) Diatribe de Aristobulo. Valckenaer's lectures were attended by English students as were those of Ruhnken, another professor at Leyden, who is to be remembered chiefly by his Lexicon to the Platonic words in the Timeus and his critical history of the Greek orators.² Daniel Wyttenbach,³ a Swiss by birth, and educated at Marburg, studied also at the German University of Göttingen. He abandoned Germany to live at Leyden under Ruhnken, after which he taught at Amsterdam for twenty-eight years, then returning to Leyden for seventeen years. Wyttenbach produced a complete edition of Plutarch's Moralia, with Greek texts, and Latin translation, with two volumes of notes, and two of an index, containing seven hundred pages. It is inter-

¹ Another interesting writer and scholar of the same time was Robert Burton, who produced, after much quiet study, the famous Anatomy of Melancholy (1621). This volume is a delightful blending of what is grave, and what is gay, filled with apt and quaint quotations that contain the essence of human wisdom, so that from them many a gem has been drawn without acknowledgment.

² See Wyttenbach, *Vita Ruhnkenii*, pp. 67-300, pp. 175-181; L. Müller, *op. cit.* pp. 84-88, 101-103.

^{*} 1746–1820.

esting with regard to the scholarly relations existing between Germany and Great Britain, that even when the two countries were at war, it was decided to print this great monumental work at the Oxford Press. The instalments of manuscript were sent successively to the Press through the British minister at the Hague, and several of these boxes were protected in a chest covered with pitch, that was mislaid for two years and a half, "during all which time," says Dr. Sandys, "the editor (Thomas Gaisford) was anxiously uncertain as to its fate." ¹

In the course of time both Oxford and Cambridge began to spread their stately halls, and to cultivate the new learning with Greek restored in some of the colleges where it had become almost unknown. There was at first a feud between the Latinists, who had thought the Roman tongue sufficient, and their fellow-students—the two bands describing themselves, respectively, as "Greeks" and "Trojans." Their animosity at times became so rampant, that parties of them took to fighting in the streets. But the progress of learning went steadily on, until England possessed classicists who were deserving of being matched with the great men upon the Continent. Charles Burney 2 declared, about the year 1800, that England had possessed a Pleiad: Richard Bentley (1662–1742); Richard Dawes

¹ Sandys, op. cit. ii. p. 463.

² 1757-1818. He wrote a critical discourse on the metres of Æschylus (1809).

(1708-1766); Jeremiah Markland (1693-1776); John Taylor (1703-1766); Richard Porson (1759-1808); Thomas Tyrwhitt (1730-1786); and Jonathan Toup (1713-1785).¹

¹ Andrew Downes (d. 1628) is associated with Savile's gigantic edition of St. Chrysostom. Greek was largely restored by him in Cambridge, where he held a professorship of Greek for forty years (1586-1625). John Taylor (1703-1766) edited Lysias, Æschylus, and several orations of Demosthenes. Peter Elmsley (1773-1825) made, besides an edition of Thucydides, some excellent annotations on various dramas. Thomas Gataker (1574-1654), a Puritan scholar, published a Greek text of Marcus Aurelius, accompanied by a Latin version, and a commentary, so that this book was "the earliest edition of any classical writer published in England with original annotations" (Hallam). In his introduction there are many observations on the Stoic philosophy, and many illustrative passages from the Greek and Latin writers are given in the note. Morhof, in his Polyhistor, i. p. 926 (Wiemar, 1747), placed Gataker among the six Protestants who were deeply read; and Gassendi calls him "a scholar of enormous reading." A very versatile investigator was the jurist, John Selden (1584-1654), who sat in the Long Parliament, and in 1617 brought forth two works of which the first (The History of Tythes) was written in English, while the second treatise (De Diis Syris) was in Latin, and had a certain mysticism running through it. His name, however, is far better known from its connection with the famous Arundel Marbles. These marbles were purchased in Assyria by an agent of the second Earl of Arundel. They were shipped to England, and placed in the gardens of Arundel House (1627). They consisted of two large fragments of a chronological table, which as a whole was called Marmor Parium. The table begins with Cecrops, and continues as far as 354 B.C. The lost fragment, which would have been the third, ended with 263-262 B.C., the year of its composition. Selden deciphered and interpreted the inscription, and published the Marmora Arundelliana with the most careful notes, description, and much learned information. When the marbles first came to England, they were gazed at by multitudes at Arundel House, and Selden won universal praise. About 1667, John Evelyn's

Of these seven men, Richard Bentley was the most memorable master of Greek and Latin. He comes, indeed, in some respects close to the great Continental scholars, having the brilliancy of Muret, the versatility of Salmasius, and some of the depth of reading which was Scaliger's. He was a burly, contentious Englishman, with a violent

diary describes the famous marbles as broken, and "scattered up and down about the garden, - exceedingly impaired by the corrosive air of London." Some of these fragments had been used in repairing the house, while the upper half of the Marmor Parium was built into the chimney, whence it was rescued once more by Selden. At Evelyn's request 250 inscribed pieces of marble were given to the University of Oxford. Only 136 arrived there. First they were inserted in the walls of the Sheldonian Theatre, and finally were placed in the University Galleries. Milton has been spoken of already as a controversialist and classicist, but belongs to the category of poets rather than that of professional linguists. He was a wide reader, wrote a number of Latin verses, "in the springtime of an ardent and brilliant fancy." His Tractate on Education (1642) is, however, less the work of a poet than of a schoolmaster and encyclopædist, since he arranged the classic authors according to a plan which he imagined will form an "easie and delightful Book of Education." He commends also the famous Italians for their commentaries and criticisms. Castelvetro, Tasso, and Mazzoni are those whom he especially mentions. It is interesting to note that he advises the Italian pronunciation of Latin and apparently of Greek. John Hales (d. 1656), and the still more famous Jeremy Taylor (d. 1667), and the dreamy "Cambridge Platonists" are an interesting but unimportant group of scholars. John Evelyn (1620-1706), though best known for his English diary, translated into his native tongue the first book of Lucretius with a commentary (1656). A very learned lady was Mrs. Lucy Hutchinson, who translated the entire six books of Lucretius, dedicating them to the Earl of Anglesey. Her lack of sympathy with the poet is shown by her speaking of him as "this Dog," and of "the foppish, casuall dance of attoms," as "an impious doctrine." Thomas Creech, a fellow of All Souls, put forth a third translatemper, and a pride so great, that when he was chaplain to Stillingfleet, Bishop of Worcester, a nobleman, who was the Bishop's guest, said to him after dinner: "That chaplain of yours is a very extraordinary man." "Yes,"

tion of Lucretius and an edition of it with notes (1695) at the Oxford Press. Creech was a man of good taste, and a more serious scholar than most of his contemporaries. Besides his Lucretius, he translated portions of Horace, Theocritus, Manilius, Ovid, Juvenal, and Plutarch. The death of John Dryden occurred in the same year as that of Creech (1700). This manly poet had translated into metrical English not only Vergil, but also Horace, Perseus, and Juvenal. His renderings were far more spirited than Pope's in his Homer; though Pope, by his neatness of phrasing, brought the great epic poet into the hands of many. Pope, however, like the elder Dumas had collaborators, so that much of what passes as his work is in reality the work of others. Furthermore, a rhymed version compelled him to depart from the original, or else to supplement it; so that the best-known couplet in his Odyssey is partly an interpolation:—

True friendship's laws are by this rule exprest, Welcome the coming, speed the parting guest. — xv. 74.

The seventeenth century was, in fact, one of classical taste. Joseph Addison, John Dryden, John Evelyn, and Joseph Spence were especially affected by the influence of Bentley, but perhaps even more by the so-called classic revival in France, of which we shall have something to say hereafter. Worthy of mention for serious classical study is Thomas Ruddiman (1674–1757), a Scotch printer and bookseller, who produced a practical grammar, entitled Rudiments of the Latin Tongue, which went through many editions, was reprinted in England, and imported into the American colonies. His more elaborate work—Grammaticæ Latinæ Institutiones— was excellent for its treatment of syntax. He also printed the Latin works of George Buchanan, that truculent Scotchman who had assailed Queen Mary in Latin verse, and had made a metrical rendering of the Psalms, which brought him more credit than he deserved. Jeremiah Markland, already mentioned as one of Burney's Pleiad, was a scholar of note, producing an edition of the Silvæ of Statius, and showing

replied the Bishop. "If he only had the gift of humility, he would be the most extraordinary man in Europe."

Bentley was a Cambridge man (St. John's College), and took his degree high among the wranglers. Later when chaplain to Bishop Stillingfleet, who had a remarkably fine library, Bentley read omnivorously, sounding deeply the vast reaches of classic lore - noting the nicest points, the most delicate shades of meaning, the cadences in verse, and the subtler laws of prose. After several minor writings, largely in the shape of letters, giving privately much aid to foreign and English scholars, he published, as an appendix to an edition of John Malalas of Antioch, his own now celebrated Letter to Mill (1691). In this letter he dealt most acutely with the Attic Drama, identifying Themis, Minos, and Auleas of the legendary history, as being actually the historical dramatists, Thespis, Ion of Chios, and Æschylus. He likewise discovered the metrical continuity (syanphæia) which exists in the anapæstic system. His monograph was less than one hundred pages in bulk, yet in it he criticised and explained more than sixty authors, Greek and Latin. By this achievement he won a reputation among scholars on the Continent, who were, it must be confessed, better able to appreciate him than his own clever classicists in Great Britain.

critical ability in his treatment of the Epistles of Cicero to Brutus, and of three plays of Euripides. He was familiar with the Continental learning, and said of his own work: "Probably it will be a long time before this sort of learning will revive in England."

Bentley had a boundless ambition in these years. He projected a collection of the fragments of all the Greek poets, and another of all the Greek lexicographers. But his *Epistola ad Millium* was alone sufficient to place him at the head of all living English scholars. To quote Mark Pattison:—

The ease with which, by a stroke of the pen, he restores passages which had been left in hopeless corruption by the editors of the *Chronicle*, the certainty of the emendation, and the command over the relevant material, are in a style totally different from the careful and laborious learning of Hody, Mill, or Chilmead. To a small circle of classical students it was at once apparent that there had arisen in England a critic, whose attainments were not to be measured by the ordinary academical standard, but whom these few pages had sufficed to place by the side of the great Grecians of a former age.

Bentley's only fault was a pugnacity and dogmaticism, which in after years made him as many enemies as his learning and genuine benevolence made him friends. In private life he was charitable to a degree, and young scholars found in him an unfailing source of aid.¹ For some years after his Letter to Mill, his energy was extraordinary, though it took no shape in literary form. He won recognition from Continental scholars, and became librarian of the Royal Library, in which he worked laboriously. The University of Cambridge asked him to obtain fonts of Greek and Latin type for the Press; and these he had cast in beautiful form in Holland. He aided Evelyn

in his work on ancient coins. He corresponded with such Continental scholars as his illustrious contemporary, F. A. Wolf, and supplied Grævius with numerous suggestions, and especially an invaluable collection of the fragments of Callimachus.

The work by which Bentley is best known—his Dissertation on the Epistles of Phalaris - need not be mentioned here at length. The so-called Epistles of Phalaris have already been suspected by many as spurious. Bentley had promised to prove their spuriousness, which he did in a short paper. This paper was resented by the Oxford editor of Phalaris, the Hon. Charles Boyle. Boyle attacked Bentley, and in so doing called to his aid his numerous friends, who saw in this controversy a battle between Oxford and Cambridge, and who, therefore, freely lent Boyle all the assistance in their power. The result was a tract marked by shallow learning and ingenious sophistry, but full of clever malice and amusing wit. These last qualities made it good reading even for the unlettered, and it was widely read, going almost at once into a third edition. Bentley then replied in his immortal Dissertation, in which he put forth a part of his gigantic powers. In profound scholarship, as in wit, he crushed his adversary, so that no answer could possibly be given, nor was one ever tried.

Soon afterward he was nominated to the headship of Trinity College, Cambridge, most splendid in its traditions and in the magnificence of its foundation. It had, however, in 1700, become the dwelling-place of cultivated idlers — men who dined and wined and cared little for the scholar's life. To them Bentley came as an unwelcome reformer, riding roughshod over their traditions and their tastes. He diverted the college funds to purely academic uses, he introduced strict discipline, and, in fact, as De Quincey wrote, "He made Trinity College at once his reward and his scourge for the rest of his life." This contest, which has been styled "The Thirty Years' War," would have killed a less sturdy man than Bentley. But he fought through it all with the combative spirit that was naturally his. More than once it seemed as though he must go under in the face of an almost unanimous opposition. At one time he was deprived of his academic degree, and his headship was taken from him; yet when he died, he was an undisputed victor, secure in the possession both of his degrees and of his headship of Trinity.

It is an interesting fact that all of Bentley's published work represents the casual hours that he could steal from his struggle against the enemies within his academic household. This fact gives us one more proof of the man's immense scholarship and his profound reading, every line of which was at the disposal of his wonderful memory. In his books we see, not the carefully finished work of a leisured scholar, but the mere play of a giant, whose mind is really bent on other things. This is true of his Dissertation on Phalaris; and it is just as true of his critical

edition of Horace (1712), in his Terence (1726), in his Milton (1732), and in his Manilius (1739), and the famous *Critica Sacra* with its notes on the Greek and Latin text of the New Testament.

An admirable account of Bentley's work as a critic will be found in Sir Richard Jebb's brilliant little monograph, published in the English Men of Letters Series.¹ There will be shown, with many interesting illustrations, the almost preternatural ingenuity of Bentley's mind. This best showed itself in the elucidation of passages in Greek and Latin, which had been utterly despaired of by preceding scholars. To throw a dazzling light into the deepest darkness was Bentley's forte.2 He arrived at his results by happy combination of vast reading, minute scholarship, and a gift for conjecture which few have ever possessed. First of all he was a critic, and in a large measure he was the kind of critic who relies largely upon what the French call le sentiment critique — that is to say, upon an instinctive knowledge of what the author had in mind, and of how he would naturally express himself. Bentley formulated this theory of his in the famous sentence: Nobis et ratio et res ipsa centum codicibus potiores sunt.3

It was Bentley's command of the three instruments of criticism mentioned here that gave him his sureness and

¹ London and New York, last ed. 1889.

² Cf. Jebb, op. cit., pp. 139-140, and p. 211.

² In his note on Horace, Carm. iii. 27. 13.

dexterity. He possessed the "critical sentiment" in a high degree, he was a master of his subject (res), and he was familiar with the manuscripts (codices). Hence his great success in conjectural emendation. He became a new leader in the field of criticism, largely because he applied to his task each of these three aids; and so long as he gave each of them an equal share in his work, he remained unrivalled in his chosen field. He leaned, however, too much toward the instinctive critical sentiment, and therefore, while his emendations often strike one by their brilliancy and ingenuity, they are not convincing. And so, for example, out of the hundred or more changes which he introduced into his edition of Horace, only four or five have been accepted to take their place in the texts of modern times.

Hence Bentley must be regarded chiefly as a pioneer. He was the first to point the way toward truly scientific methods. Others have followed in his steps, and have passed beyond him, but their achievements are all due to Bentley's inspiration and example. He serves also as a warning; for when he tried to make criticism purely subjective, he, with all his powers, began to flounder in a bog of error. Thus in his edition of the *Paradise Lost*, undertaken at the request of Queen Caroline, he evolved the absurd notion that the text as we have it is not the text as Milton wrote it, but that it had been altered in places by a copyist through whose hands it had passed. There-

fore Bentley goes through the book, and by an entirely subjective method, endeavours to restore it to its original form. The result is both ludicrous and pathetic, and may serve as a warning to those who think that merely by putting themselves in place of an author, they can think his thoughts, and rewrite what he wrote. In later years the Swedish scholars have shown something of this audacity. The French school have held to an intense conservatism, while the German school, to which we shall presently refer, learned from Bentley's best work the value of correcting one source by another, and using the critical sentiment with caution.

Bentley's emendations are dazzling examples of what a combination of learning and genius can effect. To him also we owe the discovery of the digamma in its relation to the prosody of Homer, the suggestion for a new and critical revision of the New Testament, and the flood of light which he throws upon the early Latin metres in his introduction to Terence. It is strange that not until the nineteenth century was his genius fully recognised in England. Englishmen thought of him mainly as the contentious Master of Trinity, — as a quarrelsome, pugnacious creature; whereas, even in his youth, his name was known all over the Continent as the greatest scholar of his time. As late as 1833, Bishop Monk, who wrote his life, regrets that he

¹ See The Life of Richard Bentley, 2d ed. (London, 1833). This book

"wasted his time upon conjectural criticism" instead of turning his attention to Theology. But the Germans have never ceased to give him the praise that is his due. "Thus," says Mähly, "Bentley is not merely one among the great classical scholars, but he inaugurates a new era in the art of criticism. He opened a new path. With him, criticism obtained its majority. When scholars had hitherto offered suggestions and conjectures, Bentley, with unlimited control over the whole material of learning, gave decisions." Bunsen styled him: "The founder of historical philology." Jacob Bernays, with rare enthusiasm, wrote: "Corruptions which had hitherto defied every attempt, even of the mightiest, were removed by a touch of the fingers of this British Samson."

But in the England of his day, even the most learned men were so far below him as not to appreciate the greatness of his powers. When his *Dissertation* appeared, his opponents at Oxford were aware that he had routed them; yet their learning was too slight to make them understand how utterly they were crushed; and as for the British educated public, it supposed for a long time that Boyle was in reality the victor. Thus when Bentley died, in his eightieth year, his own countrymen remembered him by his long struggle in Trinity College. They hardly dreamed that in Richard Bentley England had produced the richest intellect, and

has more to do with Bentley's quarrels and personal affairs than with his work as a critic and scholar.

the most remarkable type of scholarship that can be found in the annals of Classical Philology in Great Britain.¹

Contemporary with Bentley and following him are a number of learned men who are chronicled by Englishmen, but who made no great impression upon the history of European scholarship, though one of them, Richard Dawes,² in his emendations to the Greek dramatists, was followed in some instances by Brunck, and was afterwards confirmed by the Ravenna MS. One who is other than an Englishman may find it worth while here to recall Christopher Pitt,³ who made an excellent translation of the *Æneid*, and another of Vida's *Art of Poetry*. Thomas Gray,⁴ best known to posterity for his *Elegy in a Country Churchyard*, was a writer of very careful and delicate Latin poetry; while he was mentioned by some as among the few Englishmen of his time who thoroughly understood Plato. Richard Hurd ⁵ should be mentioned be-

¹ The principal biographies of Bentley are those of Monk, already cited; Mähly, Richard Bentley. Eine Biographie (Leipzig, 1868); Bernays, Philol. Mus. viii. 1-24; Wolf, Kleine Schriften, ii. 1030-1094; De Quincey, Complete Works, vi. 35-180; Nicoll, Great Scholars; Mark Pattison in the Encyclopædia Britannica, vol. iii; and Jebb, Bentley, 2d ed. (New York and London, 1899).

The works of Bentley were collected and edited by Dyce, 3 vols. (London, 1836). Separate works have been edited as follows: Dissertation on the Epistles of Phalaris, edited by W. Wagner (Berlin, 1874); Horace, edited by Zangemeister (Berlin, 1869); and Critica Sacra, edited by A. A. Ellis (Cambridge 1862).

² 1700-1766.

⁴ 1717-1771.

³ 1600-1748.

⁵ 1720-1808.

cause of his æsthetic commentary on the Ars Poetica of Horace, and the Epistola ad Augustum which had the unusual honour at that time of being translated into German. One cannot pause to dwell upon scholars who were able and sometimes worthy of passing notice from their Continental contemporaries. Perhaps an exception may be made in favour of Samuel Musgrave, a student at Leyden, as well as at Oxford, who numbered among his correspondents foreigners of such distinction as Ruhnken, Schweighäuser, and Ernesti. He edited the whole of Euripedes, and twice visited Paris in order to make a careful collation of the text. Thomas Tyrwhitt, one of the Pleiad, was much admired during his lifetime, and was said to have a knowledge of almost every European tongue. Certainly his literary taste was excellent. It was he who led the way in detecting the famous forgeries of Chatterton. He likewise edited Chaucer, and criticised Shakespeare with real acuteness. In some ways he was a worthy follower of Bentley's method, for he discovered many traces of Babrius in the fables of Æsop. His critical notes on many authors, and especially his valuable edition of Aristotle's *Poetics*, with a Latin version, gained him recognition from France and Germany. But other Englishmen may be omitted from this short list until we reach the name of Samuel Parr.² Parr was essen-

¹ 1732-1780.

² 1747-1825. See Field, *Life of Samuel Parr*, 2 vols. (London, 1828); and Nicoll, op. cit. pp. 139-187.

tially a Latinist, and practised the composition of Latin epitaphs and various inscriptions which gave opportunity for the cultivation of a stately style. He was fond of saying with regard to one friend or another, "It is all very well to say that So-and-so is a good scholar, but can he write an inscription?" He held that even in Oxford he could find but one inscription which resembles the models of antiquity, while in Westminster Abbey he could not find even one. Parr wrote a Latin preface to a work of Bellenden, and made it so elaborate and so closely modelled on Cicero that this preface was studied in the schools, and even in Cambridge, as a model of Latin prose, in this respect resembling the Latin of Muretus upon the Continent. Macaulay has spoken of Parr's vast treasure of erudition as "too often buried in the earth, too often paraded with injudicious and inelegant ostentation, but still precious, massive, and splendid."

In fact, Parr was not one who concentrated his powers upon a single object. His reading was remarkably wide, both in the classics and in philosophy, and yet he always failed of being supremely great. Looking over the annals of scholarship in the eighteenth century, one finds between Bentley and Porson (whom we have still to consider) less that is remarkable in the way of severe study than in a taste for elegant criticism. Bentley's strange edition of the *Paradise Lost* was, in its way, a piece of English

¹ Essays, p. 642 (London, 1861).

exegesis; and we have noted some of the various translations, such as Pitt's version of the *Eneid*, and of Vida's *Art of Poetry*. So Thomas Gray wrote more truly in a vein of criticism than of creation, while Hurd's æsthetic commentary is remarkable for its time, and Tyrwhitt's exposure of Chatterton, like his criticism of Shakespeare, was essentially the work of an analytic mind, which dealt with comparison and the application of the fundamental principles of the art which judges art.

By far the greatest English scholar after Bentley was Richard Porson, the son of a parish clerk in a small town in Norfolkshire. Porson's personality was extremely odd. In his prime he is described as having been nearly six feet high, with a bulging forehead, a Roman nose, and an expressive mouth, while his countenance suggested profound thought. Such is the description of his, perhaps, partial friends. If he was so impressive looking on ceremonious occasions, he was certainly otherwise in his daily life. His dress was slovenly and seemed to be thrown upon him; his hands were ink-stained, while his snortings and puffings and absent-minded contortions must have resembled those which Macaulay has ascribed to Dr. Samuel Johnson. Porson was, likewise, over-fond of drink, and it is related of him that even at official dinners he drank to excess; while after the guests had departed he would walk about the table, sipping up the dregs which remained

¹ 1759-1808.

in the glasses of the others. When deprived of stimulants, he had a strange craving for such things as soap, cologne, and ink, which he would lap up with avidity wherever he could find them.

His mental powers were, however, remarkable. As a mere child he evinced a high degree of memory, so that a number of gentlemen provided him with funds to enter Eton and afterward Trinity College in Cambridge. There he took various honours, until he reached a fellowship. The unfailing generosity of his friends also gave him an annual income of £100, and he was unanimously elected to the professorship in Greek, though the income from this chair was only £40. Two years before his death he was made librarian of the London Institution. In all the various posts that were held by him, he studiously neglected his duties, but no one called him to account. He was considered a prodigy, as much so when he was eating soap, as when he was overthrowing Gottfried Hermann as to nice points in Hellenic metres.

Porson was naturally an indolent person, and yet he accomplished an enormous amount of work, and did an enormous amount of reading. There is a tradition that when he made the journey by mail-coach from Oxford to London, he crammed the pockets of his long top-coat with editions of the various classics printed in small type, and by the swaying lamp of the coach, pored over them with painful assiduity. Among the really important results of

Porson's learning are (I) his restoration of the Greek inscription on the Rosetta Stone; (2) his critical edition of four plays of Euripides; (3) the preface to the second edition of his *Hecuba*, in which he completely disposed of the ingenious theories of Hermann; and (4) his *Letters to Travis*, one of his early works, yet very important, because in it he proved that the passage in the New Testament (I St. John v. 7) which speaks of the "three that bear witness in heaven" is wholly spurious. This opinion had been held by Erasmus, and by many other scholars down to the time of Bentley, but it was Porson who first made it a certainty.

Porson¹ was essentially a Grecian, and his Latinity was not so remarkable as that of Samuel Parr; but as a Hellenist he excited the admiration of Continental scholars, with whom he maintained a continual correspondence, e.g. Ruhnken, Heyne, Villoison, and Hermann. In 1808 he died, and was buried in Trinity College, at the foot of the statue of Sir Isaac Newton. A portrait of him hangs in the dining room of Trinity Lodge, and another in the University Library. If we wish to see a perpetual and ever

¹ See Watson, Life of Richard Porson (London, 1861); The Table Talk of Samuel Rogers (London, 1856); and Luard, Cambridge Essays (London, 1857); also The Correspondence of Richard Porson by Luard (Cambridge, 1866); Nicoll, op. cit. pp. 91-138, and Sandys, In Social England, vi. p. 300 foll. — Note: The authenticity of the traditional text on the "three heavenly witnesses" was defended by John Burgess, Bishop of Salisbury, but was finally and absolutely refuted by Dr. Turton, afterwards Bishop of Ely.

present monument and memorial to him, we shall find it in the beautiful Greek type in which almost all our modern texts are printed. This was cast after Porson's death from the clear and elegant letters in which he copied his Greek manuscripts, and which is now everywhere known as the "Porsonian type."

From the middle of the eighteenth century until nearly the middle of the nineteenth, such renown as English learning shed upon English scholarship was in small measure due to the influence of the great English universities. The colleges, both at Oxford and at Cambridge, were sunken into a sort of lethargy. The Fellows enjoyed their stipends in their beautiful academic homes, not by any means neglecting the routine reading of the classics, but doing nothing for the advancement of classical learning, and caring more for the fine vintages of the cellars, and the deep potations with which they ended every day, than for plainer living and higher thinking. If men of real distinction came from among their number, this was in spite of the university influence and not because of it. Thus, Lord Chesterfield spoke of the "rust" of Cambridge; and even West, the friend of the poet Gray, writing to the latter, says: -

"Consider me very seriously here in a strange country, inhabited by things that call themselves Doctors and Masters of Arts, — a country flowing with syllogisms and ale, where Horace and Vergil are equally unknown." Gray, answering him, quotes the words of the Hebrew prophet, and insists that Isaiah had Cambridge no less than Babylon in view when he spoke of wild beasts and wild asses, of an inhabitation of dragons and a court for owls.

A more serious indictment was that of England's greatest historian, Edward Gibbon, uttered in stern and stately language against the University of Oxford. After giving the particulars of his unprofitable stay there, he spoke the famous words which have become so widely known:—

"To the University of Oxford, I acknowledge no obligation, and she will as readily renounce me for a son, as I am willing to disclaim her for a mother. I spent fourteen months at Magdalen College; they proved the most idle and unprofitable of my whole life. The reader will pronounce between the school and the scholar."

It is Edward Gibbon who, thrust forth from Oxford in his seventeenth year, because he chose to become a Catholic, wrote with all the minute application and research of an accomplished scholar the greatest existing history of later Rome. From childhood he had been remarkable for his unusual memory, which his abundant reading fed. It was in Rome in 1751 that the first conception of his great work came to him. The plan then formed was originally limited to the decay of the imperial city, but after years of reading and reflection it was expanded to embrace the

¹ See Morison, Gibbon, pp. 7-10 (New York, 1879); and Lang, Oxford, pp. 199-218 (Philadelphia, 1906).

Empire, as its title (The Decline and Fall of the Roman Empire) shows. He began to write this book in 1772, after twenty-one years of reading and research, and published the first volume in 1776. Two more volumes were published in 1781, and the last three volumes in 1788. From the moment of its appearance, it ranked as a classic of the classics, nor even to this day has the most searching criticism discovered an important error in its massive structure. The book, indeed, has been rightly called, "one of the greatest achievements of human thought and erudition. It is in reality a history of the civilised world during those thirteen centuries when paganism was being supplanted by Christianity." New facts have thrown a different light upon some of Gibbon's conclusions; but the most critical scholarship has not altered the essential truth of his great panorama. His style gives point and endurance to what he writes. It has stateliness and balance and a sort of "measured melancholy" befitting the author's theme; yet it would, perhaps, have made the whole monotonous, were it not infused with a certain piquant quality which led Byron to speak of Gibbon as "the lord of irony." He died in London in 1794.

How little the universities had to do with the broader field of classics, is seen by the fact that archæological

¹ The numerous editions of Gibbon's *Decline and Fall* have all been supplanted by that of Bury in seven volumes (London, 1896–1999). See also Gibbon's *Memoirs*, edited by Hill (London, 1900); and *The Letters of Gibbon*, edited by Prothero (London, 1896).

study was carried on almost entirely outside their precincts. The manner in which they treated the Arundel Marbles ¹ is sufficiently characteristic. The reproach, however, was not applicable to Englishmen in general. Thus the so-called Dilettanti Society, which had been founded in 1733, produced some remarkable works for which it found the necessary funds. Two explorers (James Stuart and Nicholas Revett) furnished the material for a work of enduring value, known as *The Antiquities of Athens Measured and Delineated*. This book was rendered into German, and is still referred to by the student of archæology because its plates exhibit the earliest reproductions of the monuments at Athens.

No less valuable were the works of Robert Wood (d. 1771), an inveterate traveller, who brought accounts and drawings of the ruins of Palmyra and Heliopolis. Sir William Hamilton sent to the British Society of Antiquaries a minute account of the early excavations at Pompeii. The British Museum was enriched by a splendid collection of Greek and Roman marbles, bronzes, coins, gems, vases, and other antiquities; while Richard Payne Knight collected a splendid set of antique bronzes and coins, which also fell to the Museum. The travels of Sir William Martin Leake in Upper Egypt and in Turkey and Greece (1801 and 1804) both enriched the literature of archæology

¹ Supra, p. 360.

² First edition, 1762; second edition, 1825-1830.

and added to the immensely valuable collections that were sent to England. In particular one may mention his Topography of Athens (1821), Travels in the Morea (1830), Travels in Northern Greece (1835), and Numismatica Hellenica (1854).

Hence, at a time when Oxford and Cambridge had lapsed into something like an academic languor, so that men of real genius left them and pursued their studies independently, much was done to stimulate research and classical scholarship by the splendid collections that were gathered by individual enterprise and by the generosity of the Government. One of the most magnificent institutions of learning in Great Britain was, and still remains, the British Museum in London, which is rivalled only by the Louvre in Paris.²

¹ See The Memoir, by Marsden (London, 1864).

² The British Museum had its nucleus in a fine collection of books, manuscripts, and specimens of natural history gathered by Sir Hans Sloane. In 1753 he offered this to the Government for £20,000, though it had cost him more than £50,000. The money was raised by a public lottery; and then the Sloane collection with the Harleian and Cottonian libraries were arranged in Montague House, which was purchased for this object. The institution was opened in 1759 under the name of the British Museum. New collections were added continually, until in 1823 the eastern wing of the present building was erected, and the whole structure as it stands to-day was finished in 1847. It is impossible to describe it, except to say that it is divided into various departments of (1) Printed Books; (2 and 3) Manuscripts; (4) Greek and Roman Antiquities; (5) Coins and Medals; (6) Egyptian and Assyrian Antiquities; (7) British and Mediæval Antiquities; (8) Prints and Drawings. Some notion of the immensity of the Museum can be inferred

The monuments of the East beyond the domain of Hellas and Rome were splendidly exhibited in this structure, and the travellers and explorers who had stimulated a knowledge of Archæology very naturally were destined to excite and increase the study of language in a new and hitherto unknown form. English scholarship heretofore had done little or nothing to aid Philology, apart from the comparative study of Greek and Latin, leaving for the scholars of the Continent to speculate as to the relations of Hebrew which was regarded as a primal and original tongue; but now, at the close of the eighteenth century, there came an oriental scholar who was to open one of the most brilliant pages in the study of classical learning.

This was William Jones 1 (afterwards Sir William). He was born in London, and was educated at Harrow, whence he was entered at University College, Oxford. There he was able to gratify his strong desire to gain a thorough knowledge of oriental languages. His instinctive orientalism seems to have been like that of the late Edward Henry Palmer 2 in that, without visiting the East, he became versed in both Persian and Arabic, colloquially as well as in the dialects. In 1770 he published, at the from the fact that if the books in the library were placed on end in bookcases eight feet high, they would extend to a distance of more than three miles.

¹ 1746-1794.

² Edward Henry Palmer, by Walter Besant (London, 1883).

request of the king of Denmark, A Life of Nadir Shah, translated into the French from the Persian; in the next year, A Persian Grammar (1772); and in 1780 he translated the seven exquisite poems, known to the Arabs as the Mo'allakât. Sir William, like Hugo Grotius, was as remarkable in law as in literature. He wrote a number of legal essays, so that in 1783 he was knighted and made a judge in the Supreme Court of Judicature in Bengal. His delight at finding himself amidst everything that was oriental showed itself in many ways. He established the Royal Asiatic Society, to whose volumes he contributed largely, and of which he was the first President. He published the translation of a story in verse, called The Hindu Wife, and finally an English rendering of the ancient work, now well known to Sanskrit scholars, Sakuntala, or the Fatal Ring (1789). This aroused a wide interest throughout Europe, and led to a general discussion of Hindu literature. Jones was engaged in a digest of the Hindu and Mohammedan laws at the time of his death in 1704.

He was one of the most noted linguists and oriental scholars that England has ever produced; one passage penned by him in the first volume of *Asiatic Researches*, after he had given what one may call only a slight

¹ See *The Life of Sir William Jones* by Lord Teignmouth (London, 1807).

² Asiatic Researches, i. 442 (1786).

glimpse of Sanskrit, is memorable in the history of linguistics:—

"The Sanskrit language, whatever may be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either, yet bearing to both of them a stronger affinity, both in the roots of verbs and in the forms of grammar, than could have been produced by accident; so strong that no philologer could examine the Sanskrit, Greek, and Latin, without believing them to have been sprung from some common source, which, perhaps, no longer exists. There is a similar reason, though not quite so forcible, for supposing that both the Gothic and Celtic had the same origin with the Sanskrit. The Old Persian may be added to the same family." 1

¹ Though Sir William Jones rightly pointed out the peculiar similarity between Sanskrit, Greek, Latin, and Old Persian, we must remember that something had been done before his time to help the progress of this discovery. In the Middle Ages, the Arabs introduced some knowledge of the Hindu science, and the so-called Arabic (Hindu) numerals. In the sixteenth century, the Portuguese, Dutch, English, and French obtained a foothold in India. They sought there, however, only merchandise and precious stones, though some knowledge of Sanskrit was gathered by missionaries, and one of them even translated a Sanskrit poet into Dutch as early as 1651. The first Sanskrit grammar to be issued in Europe was compiled by Father Paulinus, who had it printed in Rome in 1790, only a few years before Jones's death; but the real mediator between India and Europe were men of letters, like Charles Wilkens, H. F. Colebrooke, and H. H. Wilson. In Germany, their translations were admired intensely by men like Goethe, Herder, the two Schlegers, and after them those who found in Hindu literature something more interesting to them even than its lyrics, its remarkable epics, and its very striking drama. See Frazer, A Literary History of India (New York, 1904); Macdonell, A History of Sanskrit Literature, with bibliographical notes (New York, 1900); Bühler and Kielhorn, Grundriss der indoarischen Philologie (Strassburg, 1896 foll.).

\mathbf{x}

THE GERMAN INFLUENCE

WHERE shall we look for those early schools in which there were gathered together wandering scholars who yielded the first fruits of the early universities? We have already mentioned the revival of learning promoted by Charles the Great with the aid of Alcuin.1 His successor, Louis the Pious, who "knew Latin and understood Greek," let learning lapse; and later the monastic school at Tours was of slight importance, although in it an Irish monk composed a Latin Charles the Bald, the son of Louis, was king of grammar. France from 840 to 876, and Emperor of the West. head of the school set up by him he placed the most noted philosopher of the early Middle Ages, John the Scot (or Duns Scotus), and he invited teachers from Ireland and even from Greece. At Fulda a school founded by Boniface was famous for the labours of those whom Alcuin taught. Among them was the German, Rabanus Maurus, born at Mainz, Servatus Lupus, and Walafrid Strabo. Rabanus (or Hrabanus) who founded the library at Fulda and then retired to a lonely hill, where he composed a great many encyclopædic works and several treatises on educa-

¹ Supra, pp. 219-229.

tion. He introduced Priscian's grammar into the schools of Germany, besides a short tract on alphabets and abbreviations.

In the Middle Ages many fragments of classic literature were read and studied, and some of them much more fully than we should have supposed. The historians (Cæsar, Sallust, Livy, Suetonius, and Florus) were very familiar, and Valerius Maximus was popular because he abounded in historical anecdotes. Germany was not so well supplied with books as were France and Italy. Nevertheless, one cannot be very precise upon this point. For instance, Pliny the Elder's Historia Naturalis is catalogued nine times in France and in Germany, and only twice in Italy and England. On the other hand, the younger Pliny is mentioned only twice in the book-lists of Germany, while his letters are quoted once by a scholar in Verona. There are more traces of Tacitus in Germany than elsewhere.

Petrarch, who knew something of the North, regarded the Germans of Austria as by no means strangers and *inculti*. Thus when the German Emperor, Charles IV, became head of the Holy Roman Empire² and showed himself a generous patron of literature, the Italian poet hailed him as a new Augustus, a sincere friend of all the arts. Petrarch corre-

¹ An elaborate account of the preservation of the Latin classics in the monasteries of the East, arranged in a very careful way, will be found in a number of works and monographs such as West, in *Proc. Amer. Phil. Assoc.*, 1902, xxii foll.; Wattenbach, *Schriftwesen im Mittelalter* (Berlin, 1871), etc.

² 1346.

sponded with the Emperor, from 1350 to 1356, when he was sent to the Emperor's capital at Prague, then supposed by the Italians to be 'the extreme confines of the land of the barbarians.' Before this time he had given the Emperor an effigy decorated with gold and silver coins of ancient Rome, showing the images of his great predecessors. Arrian's account of Alexander in easy Latin verse was taken to Vienna (1442–1455). Æneas Silvius wrote (1450) a Latin treatise on education for the benefit of his imperial master.

When Æneas was made Pope in 1459, his former pupil, Hinderbach, who was fond of him, promised on behalf of Germany that this country should continue to cultivate the humanism of which the new Pope had been so admirable an example. Classics were, therefore, soon taught by him (1460-1469); and he also lectured in Vienna, not only on mathematics but astronomy. His pupil, Johann Müller. of Königsberg, best known as Regiomontanus, lectured on Vergil, Terence, and Cicero's De Senectute. A number of classicists and also astronomers now spread throughout Germany, establishing rude schools where lectures were regularly given and where editions and translations of Greek and Latin works were put into circulation. It is interesting that at Ratisbon the calendar was so studied as to lead to a proposal for its correction. Because of this the Archbishop was summoned to Rome, where he died.²

Let us trace briefly the rise and progress of the greater

2 1476.

German universities. It came partly from Paris and partly from the influence of Italian universities, especially Bologna. The earliest of them was at Prague (1348), and the next the University of Vienna (1365). Paulsen says that both of these were on the eastern borderland of German civilisation in that Paris was near enough for Western Germany, and because between the old church schools, such as Cologne, a close connection was kept up. In the same century (1385) the Westerns founded the University of Heidelberg (1385) and the University of Erfurt. of these remain at the present day; Cologne having been closed in 1704 and Erfurt in 1816. It must be remembered that it was Austria and the parts of Germany which bordered on Italy that receive more directly the fruits of French and Italian culture. Though rude and touched with the semi-orientalism of Byzantium, Austria was at least more civilised than the barbaric North. All this is prior to the Renaissance, and these universities were the homes of scholasticism. A second period of great activity opens with the humanistic movement. Such doctors as Albertus Magnus and Thomas Aquinas and Duns Scotus had taught and argued in many of these schools. Then came the Hussite schism which lost Prague to Germany. In its place the University of Leipzig was founded (1409). Rostock opened its halls (1419) to meet the needs of the Baltic countries.

¹ Originally devoted solely to the study of law.

The humanistic movement naturally called into being fresh seats of learning. Of these there were nine German universities, of which four (Greifswald, Freiburg, Basle, and Tübingen) still continue to exist. It is characteristic of the German mind that the universities in Austrian Germany did not arise gradually like the older ones in France and Italy. They were established after a scheme already in operation, both the spiritual and temporal power contributing to their foundation. It was the Pope who founded the institution, and gave it the privilege of bestowing degrees; while its continued existence was assured by the local sovereign, who provided the revenues and granted to the university temporal and corporate privileges. Thus we see that the German notion of a higher seat of learning was one that had been mapped out in advance, with a definite purpose and a somewhat cut-and-dried academic ideal. The triple division of scholaris, baccalaureus, and magister is, as Professor Paulsen says, "evidently identical with that of apprentice, journeyman, and master workman, which we find among the mediæval artisans." 2 Thus the historical development of German universities went on, though with alterations in their character concerning which we shall briefly speak. For a long time a

¹ Greifswald (1456), Freiburg (1457), Basle (1460), Ingolstadt (1472), Trèves (1473), Mainz and Tübingen (1477), Wittenberg (1502), and Frankfürt-on-the-Oder (1506).

² See Paulsen, *The German Universities*, Eng. trans. by E. D. Perry (New York, 1805).

university might be a great seat of learning, or it might be only a humble school with a small foundation, destined to be swept away in a few years. It may be convenient for reference to name the universities in Germany and Austro-Hungary which exist to-day, and to say a word or two con-

¹ In Germany to-day there are twenty-one universities, the largest being Berlin (with about 5800 students), Munich and Leipzig, Bonn, Breslau, Freiburg, Halle, Tübingen, Heidelberg, Göttingen, Marburg, Strassburg, Würzburg, Kiel, Königsberg, Erlangen, Giessen, Greifswald, Münster, Jena, Rostok. At Freiburg, Munich, Münster, and Würzburg the faculties of theology are Catholic; at Bonn, Breslau, and Tübingen they are mixed Catholic and Protestant; while the faculties at all the other universities are Protestant. It might as well be added that the universities of Austria-Hungary number seven — Vienna, Grätz, Innsbruck, Pesth, Breslau, Cracow, and Limberg.

Of the distinguished men who first made German learning illustrious omitting those of whom we shall speak above - are Peter Luder (c. 1450). who matriculated at Heidelberg before he visited Rome. Later he returned to his German academic home and lectured on the Latin poets (1456). This was such an innovation that his older colleagues did everything possible to hinder him in his work, so that when the plague afflicted Heidelberg, Luder lectured with much applause at Ulm, Erfurth, and Leipzig. One of his most ardent pupils at Leipzig was Hartman Schedel (1440-1514), who became known as a collector of humanistic literature. It was he who preserved a great part of the journal of Ciriaco d'Ancona (see supra, p. 268) with copies of monuments and inscriptions. His own collection is now in the library at Munich, and his work on the history of the world from the Creation to the year 1402 is everywhere known as the "Nuremberg Chronicle." His sketches of ancient monuments are said to have inspired some of the drawings of Albrecht Dürer, now in Vienna. Schedel was, therefore, an important figure in the humanistic period of German scholarship. Another leading humanist who deserves especial mention was the Frisian who is best known by his Latinised name Rudolphus Agricola (1444-1485). His mental and

cerning their characteristics. In the earliest days of German scholarship the universities were essentially scholastic.

physical activity is shown by his interest in travel and observation; for he was educated at four German universities and, perhaps, at Paris. He then journeyed to Italy, studying at Pavia and at Ferrara, where he was a student of Greek under Theodorus Gaza. After so much activity he appears to have dropped to a rather humble station in his native city of Groningen, where he was town clerk for four years. However, during this time he acted as a town-envoy, and often visited Deventer, where he met Erasmus. Later he taught at Heidelberg, lecturing on Aristotle, and translating selections from Lucian. Humanists in Germany looked to him as their leader. Like Erasmus he was very influential in his private and personal associations, though his scholarship was somewhat overrated. He wrote a treatise on education which appeared in the same volume as like works by Erasmus and Melanchthon, an honour which it did not deserve. He had, however, the truly humanistic spirit, and urged carefulness in reading, practice of the memory, cheerful alacrity, and a quiet but earnest opposition to the stiffness of scholasticism. Alexander Hegius (1433-1498), who was a teacher of Erasmus, made Deventer a great humanistic centre of Northern Germany. He mocked at the old mediæval text-books, and pointed back to the Latin Classics as the true source of a perfect Latin style. There follows him, Rudolf von Langen (1438-1519), who studied at Erfurt, visited Italy, and finally founded a great humanistic school at Münster. Another famous school was that of Jacob Wimpheling (1450-1528) at Schlettstadt in Alsace, which was the third of the schools of Germany. Later, at Strassburg to which he migrated, he founded a literary (i.e. humanistic) group which followed the teachings of Erasmus. He was the friend of Sebastian Brant, well known in English literature as the author of the Ship of Fools (1494). Conrad Celtes (1459-1518) is rightly called by Dr. Sandys "the knight-errant of humanism in Germany." His early years were unfavourable, but after spending some time under Agricola at Heidelberg and learning a little Greek, he made his way into Italy, living with the most cultivated Italians at Padua and Ferrara, and in Rome. When he returned, he received the poet's crown from Fried-

From the middle of the fifteenth century, the humanistic influence came in strongly, especially with those men whom we have already mentioned. Subsequently arrived a period of partial reaction, owing to the influence of Martin Luther rich III at Nuremberg. Celtes was the first German to win this honour. Immediately afterward he founded humanistic societies in rapid succession in Poland and Hungary, and along the Rhine. The last (at Mainz) was a very famous group. Its first president was the Mæcenas of the time, Johann von Dalberg, and among its members were the two Greek and Hebrew scholars, Trithemius and Wilibalc Pirkheimer. Johannes Trithemius was a great collector of manuscripts, and is still remembered for his learning. Celtes, also a member of this group, was later called to be the head of the Imperial Library in Vienna. He travelled a great deal throughout Germany, and described his adventures in a collection of Latin poems, many of which do not tend to edification, but suggest the semi-pagan spirit of the early Renaissance. He is best remembered to-day for a discovery which he made in the Vienna Library of a thirteenth-century copy of a Roman map (itinerarium). The original was as early as the third century, and is of great interest, although a part is missing. This map Celtes bequeathed to a rich patron of learning, one Conrad Peutinger of Augsburg, from whom it gets its familiar name Tabula Peutingeriana. This copy was painted at Kolmar after the model of an original map, which consisted of twelve broad strips of parchment showing all those parts of the world that were known to the Romans. The pieces which should contain Spain and Britain are lost, with the exception of the southeast corner of Britain (Kent). It is disproportionately lengthened from east to west, the ratio of its height to its breadth being 1:21. The distances from town to town are marked on lines running from east to west. The relative sizes of the towns are indicated by distinctive marks. Those who are interested in this very early map can find it in the little Atlas Antiquus of Justus Perthes (Gotha, 1893). - On all that proceeds, see Lernen und Forschen (Berlin, 1892); Pearson, Ethic of Freethought (1901); Janssen, A History of the German People, Eng. trans., i. 63-80 (London, 1891); Bursian, Geschichte der klass. Philologie in Deutschland, etc. (Munich, 1883).

(d. 1546), who introduced a purely ecclesiastical mode of learning, but it was checked by the great scholars who preceded F. A. Wolf (1739). If we prepare a scheme of German scholarship from Luder down to Bopp,¹ it will stand somewhat as follows: introducing not only Criticism and Hermeneutics, but Archæology, including History, Grammar, Religion, Geography, Chronology, Metrology, Numismatics, and Epigraphy.

- I. Ecclesiastical Period (1400 to c. 1415).
- II. Humanistic Period (c. 1415 to c. 1660).
- III. Ante-Wolfian Period (c. 1660 to c. 1739).
- IV. Wolfian Period (c. 1739 to c. 1810).
 - V. Post-Wolfian Period (c. 1810 to c. 1870).

After 1870, as will be seen, German scholarship was no longer isolated, but belonged to the cosmopolitan creative study of all the western world. There are many different ways of subdividing these periods of German learning. Almost all scholars agree in speaking of the Ecclesiastical Period. Almost all of them will speak of the Humanistic Period. After that, there are other divisions in terminology. Thus we shall hear of the Grammatico-critical School, of the Historico-antiquarian School, and finally of the Junggrammatiker, until the scholarship that is purely German ceases to exist as an isolated phenomenon. Germany first teaches all the world, and then learns from all the world, until at last the divisions of learning cease to be

¹ That is to say, from about 1451 through 1867.

National, and become wholly Cosmopolitan. The Ecclesiastical Period has already been sufficiently described in the preceding pages, and so has the spirit of the early Renaissance.

One should speak more fully of the first great Grecian to arise in Germany, in the person of Johann Reuchlin,1 who studied at Paris and at Basle, - at the latter school under a native Greek. It was there that he wrote a Latin dictionary, entitled: Vocabularius Breviloquus, an excellent work which was preferable to its predecessors in the clearness of its arrangement, and which was the more remarkable from the fact that he was only twenty years of age when the book was finished. After some further study, he taught both Greek and Latin at Orléans and Poitiers. He describes Greek as "necessary for a liberal education; for it leads us back to the philosophy of Aristotle which cannot really be comprehended until its language is understood." Later, in Rome, he met Argyropulos, who was surprised at Reuchlin's command of Greek. Later still he learned Hebrew, and thenceforward pursued the study of it as the most important thing in life. For the last year of his existence he was professor of Greek and Hebrew at Tübingen.

The fact that Reuchlin urged the study of Hebrew was distasteful to the bigots of the day. They preferred dog-Latin and still more barbarous Greek to a language which they regarded as almost impious to learn. Reuchlin was,

¹ 1455-1522.

therefore, abused and assailed for a long while, until the enlightened humanists of the day came to his defence. They believed that anything and everything should be studied, and they fell upon Reuchlin's enemies like a band of light horse. These witty and nimble-minded scholars came to the defence in the once famous satire called Epistolæ Obscurorum Virorum (1516-1517). The first book of the Epistolæ was largely composed by a humanist named Johann Täger, while the second was mainly the work of the famous writer, Ulrich von Hutten; and the quiet, deeply learned leader of this band was Conrad Muth (Mutianus Rufus), who had been at school with Erasmus, and with him had felt the earnest inspiration of early humanism. Returning to Germany, he made his canonical residence at Gotha, and over the door he set in golden letters the words: Beata Tranquillitas. There he lived as a lover of all that is beautiful in literature. It was a strange fate that he should have survived to see his home plundered by a Protestant mob at the time of the Reformation.

For Protestantism had broken in upon the mild and genial humanistic learning, especially in Germany, where the followers of Luther were savage in their assault upon whatever was refined and beautiful. The humanists saw that they had more to fear from the stark ignorance of the Protestants than from the occasional intolerance of the Catholics. Not long, however, did this Lutheran riot continue. The invention of the printing-press and the setting up of printing-

presses all over Europe did much to beat back Protestantism of the radical sort, and to bring again the more graceful attitude of the classicists. The desecration of cathedrals with their beautifully painted windows, the pillaging of art galleries, the smashing of the most exquisite statuary, these atrocities did not continue for very long. With the multiplication of printing-presses a love for classical learning returned, and before the end of this period (1660) the modern languages had begun to exercise an influence which classicists deplored, but which was in reality a humanistic trait. Among the greater humanists of Germany was Helius Eobanus Hessus, 1 who lectured to enormous audiences on poetry and rhetoric. Of his pupils was the famous Camerarius,² who formed one of the interesting group who clustered around the press of Froben at Basle. He is chiefly noted for his criticism of Roman chronology.3 Among his friends at Basle were Beatus Renanus,4 the associate and biographer of Erasmus, and well known for his editio prince ps of Velleius Paterculus, and his work on the text of Tacitus; Clareanus, who held the professorship of poetry; Gryænus of Heidelberg, famous for discovering a manuscript of the first five books of the fifth decade of Livy; and finally Galenius of Prague, who produced editions of Callimachus and Aristophanes, as well as of the Planudean

¹ 1488–1540. ² 1500–1574. Really Kammermann.

^{*} See Bursian, op. cit., i. 154 foll.

⁴ See his life by Horawitz (1872-1874).

Anthology. Many minor scholars helped to give distinction to Basle, partly by residing there, and partly by accepting professorships for short periods in French and German universities. In this way they scattered the rich seed of classical learning and of liberal education.

The great educator whom Germany remembers best to-day by the name of "The Preceptor" was Philip Schwarzerd, better known to us and to the world at large as Melanchthon.¹ Though a friend of Luther, he could not be in thorough sympathy with that boisterous, unruly spirit, but was instead a classical scholar of great diligence. Germany to-day feels the influence of Melanchthon in its severe training in grammar and style. Melanchthon wrote grammars of Greek and Latin and a large number of classical text-books. The works that he composed in Latin, especially his Latin Letters, are written in a style that is clear and simple, though without distinction. He was a Lutheran in his dislike for the paganism of Italy; in fact, he was essentially a German philologist and not an Italian classicist or a French one.

Johann Sturm of Strassburg was another important name in the educational development of early Germany.² He

¹ 1497-1560. There is an excellent biography of Melanchthon by Hartfelder, in Woodward's *Renaissance Education*; while he is criticised by Pearson in his *Ethic of Freethought*, already quoted. A biography in English by T. B. Saunders has been announced for publication.

² 1507–1589. Other educators who were contemporaries of Sturm were Rivius, who corrected many passages in Sallust; Michael Neander,

was head-master of the school at Strassburg for forty-three years, and made the chief work of his scholars the writing and the speaking of Latin, for this seemed to him the whole of education. Pupils from all countries came to visit him, and his school became a sort of model for most German gymnasia. It happened that Roger Ascham, who never met him, was a correspondent of his and once wrote to him:—

"For our time the odde man to perform all three perfitlie, whatsoever he doth, and to know the way to do them skilfullie, whan so ever he list, is in my poore opinion, Joannes Sturmus."

A work written by Conrad Gesner, just mentioned, was a somewhat remarkable attempt at achieving what many were at that time studying and discussing with great interest. This was a book known as *Mithridates* (1555), which has been styled the first effort toward the comparative study of language. When Hebrew was added to Greek and Latin as a subject for wide study, linguists began to look at it with a peculiar interest. Very many scholars held that all living languages must have sprung from a single tongue.

who prepared a so-called Opus Aureum, made up of Greek and Latin moral sayings; Basilius Faber, whose Latin Thesaurus or Lexicon long survived, being reëdited by Cellarius (1686); Grævius (1710); and J. M. Gesner as late as 1726. An earlier Gesner at Zürich wrote a sort of combination of a biographical-bibliographical dictionary, united with an encyclopædia, together with a dictionary of Greek and Latin, and one of proper names. A pupil of Rivius was Georg Fabricius (1516–1571), who studied in Italy, and explored with lively interest the monuments and inscriptions in Rome. Like modern editors of the familiar classics, he used his knowledge of topography and antiquities to illustrate his editions of them.

Furthermore, they argued that as the Old Testament was written in Hebrew, Hebrew must have been the earliest language in the world,—a theory which has found adherents down to Gesenius in recent times. Great was the industry devoted to collecting words from different languages which had the same meaning, in order that they might then be studied for traces of their common origin.

After the rise of the Reformation there was less literary study of the classics, but everywhere one might notice a sterner and stricter discipline both in the schools and in the universities. Especial branches of learning were cultivated. Lexicography is represented by Basilius Faber (1571), and a very thorough knowledge of Greek with critical acumen were the characteristics of Friedrich Sylburg and Lorenz Rhodomann, the latter of whom was remarkably skilful in writing Greek hexameters, so that his epic poems which he put forth anonymously (1588) were widely believed to be genuine works of antiquity.

In Hungary during the Renaissance there were some few well-trained classical students, such as Johannes Vitéz (d. 1472), who corresponded with the Italian scholars; and Jánus Pannonius, who brought to Hungary a large collection of Greek and Latin manuscripts. The king of Hungary, Matthias Corvinus, was interested in the humanities. He founded an academy at Pressburg, and also a university at Buda, where he maintained thirty copyists and artists

¹ 1443–1490.

to continue the supply of illuminated manuscripts. It is interesting that Latin remained the spoken language of the Hungarian aristocracy down into the nineteenth century. Maria Theresa's famous harangue to the Hungarian nobles was delivered in Latin, as was their spirited response: "Moriamur pro rege nostro, Maria Theresa!" Latin was also the official language of the Hungarian Diet, until 1828.

¹ Almost the same thing may be said of Poland, where a well-known humanist who had studied at Cracow, and seems never to have visited Italy, maintained for some twenty years a brisk correspondence with Filelfo. The first Latin history of Poland was written by Johannes Dlugosc. Latin poetry was mainly studied by Gregor of Sanok, who finally became a lecturer at Cracow. The most famous humanist, however, who made Latin popular in Poland was Filippo Buonacorsi. He, with Celtes, founded classical societies both in Poland and Hungary, as the latter had done in Western Germany. See Zeissberg, Die polnische Geschichtsschreibung des Mittelalters, etc. (s. 1. 1847), and on Polish classicism see Sokolowski and Szujski, Mon. Medii Ævi, t. ii (Cracow, 1876). Classical studies in Russia began in the seventeenth century, when the Academy of Kiev was founded in 1620. Latin was studied rather than Greek in that century, and all instruction was carried on in Latin. After Kiev, Moscow became a seat of learning, after the establishment there, in 1679, of a printing school. In this the study of Greek was carried on and was subsidised by the government. This developed into the Slavo-Græco-Latin Academy (1685), with teachers who were of Greek descent, but who had taken their doctor's degrees at Padua. This academy was favoured by Peter the Great, and here were published translations of classical authors. twenty-six volumes being rendered into Russian by the long-lived scholar, Martynov (1771-1883). The University of Moscow was founded in 1755, the University of Vilna in 1803, the University of St. Petersburg in 1819, the University of Kazan in 1804, the University of Kharkov in 1804, and that of Odessa in 1865. Much was done for the promotion of literary studies of every kind by Catharine II in the

Further students of distinction who followed in the seventeenth century were Johann August Ernesti,¹ a famous teacher of Latin style, especially of the pure Ciceronianism. His most famous books are an edition of Cicero in five volumes (1739) with an *Onomasticon Ciceronianum* published after his death at Halle (1832). To this school of stern scholarship we must also ascribe Johann Jacob Reiske, a student of oriental Greek, and author of full editions of Plutarch, Dionysius Halicarnassensis, and others, all of which were not published until after Reiske's death. He wrote his own autobiography, published in

eighteenth century, she who summoned Voltaire and other French writers of distinction to offset the German influence, which remained and continued to be very strong. Almost all the distinguished scholars of Russia were either of German birth and training, or at least of German training. Thus R. T. Timkovski had studied at Göttingen, under Heyne; Professor D. L. Kriukos (1809-1845) had been a pupil of Boeckh; while one of the most brilliant scholars at St. Petersburg, Professor N. M. Blagoviestschenski (1821-1891) had "heard" Hermann, Becker, Haupt, Creuzer, and Schlosser at Leipzig and Heidelberg. This scholar wrote a very able work on Horace and his times, besides an annotated translation of Persius, and also discussed certain interesting questions of Roman History. Of native stock were V. K. Lernstedt (1854-1902), who made an edition of Antiphon; L. F. Voevodski (1846-1901), who wrote a peculiar treatise on cannibalism in Greek Mythology, which, however, he regarded as bearing upon the Sun Myth. Of the many Germans who taught in Russia the best known are Christian Friedrich Matthæi of Moscow, where he discovered a manuscript of the Homeric Hymns; C. F. Graefe at St. Petersburg, who edited Nonnus, using German in this work because "the revival of classical learning belongs to the Germans." During the ¹ 1707-1781.

² D

Leipzig (1783). The true founder of the science of Archæology was Johann Joachim Winckelmann. Winckelmann was the son of a poor cobbler, and was for many years a charity scholar, rising gradually by his energy and ability. At length his associates advised him to follow that career which ultimately made him the first great creative and critical scholar in the field of Classical Archæology. He spent much time in Rome, Naples, and Pompeii, and became librarian to Cardinal Albani, the most famous collector of his time, to whom he owed innumerable opportunities. In many ways his work led to the elevation of taste in the decorative arts; but his monumental production is his Geschichte der Kunst des Alterthums, which appeared in 1764 (new edition by Julius Lessing with biography, 1882). Winckelmann was the

middle of the nineteenth century it may be said in general that the Germans greatly influenced and stimulated Russian scholarship. August Nauck spent the better part of his life in teaching Greek at St. Petersburg, while Lucian Müller was equally conspicuous for his work in Latin. Archæology owes much to Russia, and its study began in the reign of Peter the Great, in the year of whose death the Academy of Sciences was founded. After the Crimea had been conquered in 1783, great interest was taken in the exploration of this former home of Greek civilisation. Much has been done in this field by H. E. Köhler, an authority on ancient gems, and especially by L. Stephani (d. 1887), who spent nearly forty years in charge of the antiquities in the Hermitage at St. Petersburg, while writing many valuable monographs on the researches in Southern Russia. See the interesting synopsis of the history of classical scholarship written by Professor Maleyn of St. Petersburg, and incorporated by Dr. J. E. Sandys in the third volume of his work already cited, pp. 384-390.

teacher of his age and the expounder of Classic Art. It was his theory of the Beautiful which greatly impressed Goethe and which led Gotthold Ephraim Lessing to put forth his famous discourse called Laokoon, which has never ceased to be discussed. Winckelmann's death has an interest for the superstitious. In April, 1768, he left Rome to revisit Germany; but on the way a strong feeling came upon him that he should not depart from Italy. This feeling finally amounted to a horror, yet a man so sane as Winckelmann disregarded it, and visited both Munich and Vienna. At the Austrian capital he was received with great honour by the Empress, Maria Theresa, who presented him with a number of very ancient and rare gold coins. Leaving Vienna, he hurried to Trieste to take ship for Italy. On his journey, however, he fell in with a man named Arcangeli, an ex-convict, whose greed was excited by the gold, and who in consequence entered Winckelmann's room and stabbed him to death, on June 8, 1768.

Joseph Eckhel,² founded the science of Numismatics by making a specialty of Greek and Latin coins and medals, on which he wrote eight volumes, entitled *Doctrina Nummorum Veterum*, the first volume appearing in 1798 and the whole work being reprinted in a fourth edition (1841).

Christian Gottlob Heyne, a persuasive teacher steeped in reading, ends this so-called Ante-Wolfian Period. He

¹ See K. Justi, Winckelmann, sein Leben, seine Werke und seine Zeitgenossen, 3 vols. (Leipzig, 1872).

² 1737-1798.

was professor at Göttingen, and though his learning was preëminent, it was his exceptional gifts as a teacher which gave him and his university the leadership at this time. It is said that of his students at least one hundred and thirty became professors in various universities throughout Germany and Holland. August Wolf was born in 1739, and lived a long life and died in 1824. He was, as we have already said, the true founder of modern philology. He was at first Professor of Philosophy at Halle until that university was closed after the battle of Tena (1806). His teaching was marked by great breadth, since he held that classical study dealt with every phase of the life and thought of antiquity. In classical antiquity he found a model of public and private life, resting upon the highest ideals. In 1807 he went to Berlin, where he took an active part in founding the new university; but, unfortunately, he became involved in petty quarrels, so that he left Germany and visited Southern France, where he died. His lasting fame rests upon his so-called Prolegomena ad Homerum (1795). it he traced the history of the Homeric poems, and sought to show that they have both been greatly changed from their original form, and that they are made up of separate poems by different authors. It is not true, how-

¹ See *supra*, pp. 2-3. He attracted much attention by insisting on being matriculated in Philology, though there was no such faculty. He was told to matriculate under Theology, but refused; and thus he was the first *Studiosus philologiae* in Göttingen.

ever, as many believe, that he denied the existence of a personal Homer. Wolf's views had in part been anticipated by Giambattista Vico, by Robert Wood, and in a fashion by Bentley. They go back even to the χωρίζοντες of Alexandria; but Wolf knew nothing of Vico, and moreover his own minute researches were extremely stimulating, apart from his conclusions.¹

Wolf marks the beginning of a new era in classical scholarship. From this time on we find in Germany two schools, one devoted to Criticism and Exegesis (the Grammatico-critical School), of whom the great exponents were Gottfried Hermann,² a sort of German Bentley; Christian August Lobeck,³ whose Aglaophamus (1829) contains a vast fund of information on the Orphic and other mysteries of the Greeks; August Immanuel Bekker,⁴ who, besides preparing text-editions of Greek authors, largely helped to edit the Corpus of the Byzantine writers in twenty-four volumes, and also a Homer with the digamma

¹ See Volkmann, Geschichte und Kritik der Wolf's Prolegomena (Leipzig, 1874).

² 1772-1848. Hermann was professor at Leipzig (1803 foll.) and gave courses which were wide in their scope and interest, especially in grammar and composition. "Know your authors at first hand," was his motto. In the study of Greek prosody and rhythm, he was likewise a great and original expounder. He first set forth the doctrine of the Anacrusis, and was the father of Metaphysical Syntax. See W. G. Hale, A Century of Metaphysical Syntax, published in part of the Proceedings in the St. Louis Exposition in 1904.

^{3 1781-1860.}

¹ 1785-1871.

printed in the text. He spent a long time in making researches throughout the principal libraries of Europe, and he studied the texts with entire indifference to the printed editions. An epoch-making work was that of Karl Lachmann on Homer's Iliad (1807), and above all, his immortal masterpiece, in which he took the hitherto rent and little understood poem of Lucretius, and with his fine critical sense — far greater than Bentley ever possessed — restored it to its rightful place among the masterpieces of Latin genius. Lachmann was first a professor at Königsberg and afterward at Berlin, where he remained one of the most distinguished of his colleagues for more than a quarter of a century. It was late in life that he produced his Lucretius, an account of which is given in the preface to that poet by H. A. J. Munro, who says: "Hardly any work of merit has appeared in Germany since Lachmann's Lucretius, in any branch of Latin literature, without bearing on every page the impress of his example." He was, in fact, the creator of a strict and scientific system of textual criticism. In this he follows Bentley, of whom he cannot say too much in praise; but he goes beyond Bentley in restraining his "critical sentiment" by ascertaining the original form of the work through the evidence of manuscripts, and the correction of their errors. He was renowned no less for versatility than for profound learning, so much so that it may be said with truth that he was a master of three great departments of philology - oriental, classical, and Teutonic. In each of these he produced an epoch-making work. For, besides his Lucretius, by which he is perhaps the best known, he applied the principles of Wolf's Prolegomena to the German epic of the Nibelungen to show that this could be resolved into twenty original ballads or lays; just as he resolved the Iliad into eighteen, for he regarded the poem as inconsistent in details. In his treatment of Lucretius he was followed especially by Hermann Köchly, by Jacob Bernays, and by the Englishman, H. A. J. Munro; but we must not forget that the first clear light upon this difficult text came centuries before, from Lambinus (Denys Lambin). The third great achievement of Lachmann was his treatment of the New Testament, in which he brought out the methodology of scientific textual criticism.1 To the same period belong in the Grammatico-critical School the illustrious names of August Meineke,2 who wrote a critical history of the Greek comic poets, and edited the fragments, assisted by Theodor Bergk, as also the Alexandrian poets in his Analecta Alexandrina, K. W. Dindorf,3 Karl Lehrs,4 Friedrich Ritschl,5 and August

¹ 1703–1851. ² 1700–1870.

³ 1802-1883. With his brother Ludwig he edited all the Greek plays and other texts, besides a lexicon to Æschylus. Both brothers shared in the making of three famous series—the *Teubner*, the *Tauchnitz*, and the *Didot*.

⁴ 1802-1878. A great authority on grammatical studies in Greece.

⁵ 1806-1876. See Friedrich Ritschl, by L. Müller (Berlin, 1878).

Nauck,¹ who did so much for the lives of the Greek tragic poets. He was a professor in the Academy of St. Petersburg,—one of the many who carried the influence of German scholarship to Russia, as did his contemporary, Lucian Müller.

In the Historico-antiquarian School, we find Barthold Georg Niebuhr, ² founder of a new school of historical study. Niebuhr was a Dane by birth and a lawyer by profession. But soon after the University of Berlin was founded he was called to the chair of history in that institution, where he lectured almost wholly on the annals of Rome, before brilliant audiences who were charmed by his novel manner of treating what had become a threadbare subject. Hitherto, Roman history had been told and written of with no great discrimination. The early legends had been accepted or rejected in a lump. But Niebuhr approached them in the spirit of a lawyer or a judge who knows that all human testimony is imperfect and yet contains a certain amount of truth. Therefore, he proposed without prejudice to take up the written records of Livy and other authors and to weigh and balance them as though he were presiding in a court. This method was singularly acute, and on the negative or destructive side was widely accepted. But when he came to constructive work and

^{1 1822-1892.}

² 1776-1831. See Winkworth, The Life and Letters of Niebuhr (London, 1853), and Eyssenhardt, Niebuhr (Gotha, 1876).

himself put forth two volumes of a History,¹ they were treated by historians according to Niebuhr's own method, and had their defects pointed out with much acumen. The theory of "tribal lays" had been somewhat overdone; and when Niebuhr resolved this early history of Rome into the remains of a series of poetical ballads, he failed to convince. He was not even original.²

Yet it was Niebuhr who first treated his subject in a truly scientific spirit so far as his early lectures went. His studies of the population of Rome under the Republic, and its divisions — the plebs, the patricians and plebeians, the ager publicus, etc. — were all new and acceptable to scholars. Furthermore, he put forth two volumes of miscellanies; mainly philological, and dealing partly with the criticism of classical texts and topography, having himself in Italy discovered new fragments and palimpsests. Niebuhr had a freshness and vivacity of style which helped convince his hearers; nor was this effect diminished by a remarkable self-consciousness such as once led him to say: "The discovery of no ancient historian could have taught the world so much as my work." Though in

¹ In 1812.

² Perizonius, the Dutch scholar, had anticipated this theory (1685), while the Frenchman, Louis de Beaufort, had published (1738–1750) proofs of the uncertainty of early Roman History. Niebuhr was also preceded by Arnold Heeren (1760–1842), whose monographs on ancient commerce, politics, and colonization were in many cases written before Niebuhr began his lectures at Berlin.

³ 1828-1843.

detail he was often wrong, the later researches of able men¹ have not shaken the foundations of his history. He was, in fact, a Danish Gibbon, dealing with the early Republic as Gibbon did with the later Empire.²

¹ His friend, Georg Ludwig Spalding (1762-1811), went to Berlin with Niebuhr and there put forth three volumes of a fine edition of Quintilian, the fourth volume being seen through the press by P. K. Buttmann with an excellent lexicon to the author by Bonnel in a fifth volume.

² Other scholars of the time were the famous F. E. D. Schleiermacher, who did so much for German prose style and for the analytical study of Plato; Ludwig Friedrich Heindorf, also a Platonist, but best known for his notes on Horace; Philipp Karl Buttmann (originally Boudemont), author of a clearly expressed but purely dogmatical grammar, and of a Lexilogus, an acute study of the Homeric vocabulary. His other works may be ignored. Immanuel Bekker (1785-1871), of Berlin, was a notable critic of Greek texts. For sixty-one years he held his professorship at Berlin, seldom lecturing, seldom heard, yet winning a brilliant reputation among scholars for his collection of manuscripts (over four hundred) and his improvements in the existing texts of Aristotle, Plato, the Attic orators, the Byzantine historians, many late writers, and in Latin, of Livy and Tacitus. It was first said of him, and not of von Moltke, that "he could be silent in seven languages." See H. Suppe (Göttingen, 1872). August Boeckh (1785-1867) was the rival of Gottfried Hermann. He devoted his attention to the antiquarian aspect of the classics. He made especial studies of Plato and the dramatists, while his elaborate edition of Pindar is a monument to his industry (1811-1821). He was professor of Eloquence in the University of Berlin for fifty-six In his work he was more interested in broad views of classical learning, and unlike Hermann he published a treatise on the public economy of Athens (Eng. trans., Boston, 1857), and a great part of the Corpus Inscriptionum Gracarum, but not ended until (1877) ten years after his death.

Among the earliest text-critics and grammarians after Hermann was Christian August Lobeck (1781-1860), who taught at Wittenburg and Königsberg. He discussed with much acuteness the laws of word-formation in Greek, taking up the terminations of nouns and the general laws of the language in his Phrynicus (1820), his notes on a fragment of Herodian (1820), and his great Pathologia Sermonis Graci (1843-1862). His comprehensive knowledge of Greek literature enabled him to pour forth a multitude of examples and to detect and illustrate the living phenomena of the language. In addition to Lobeck was Gregor Wilhelm Nitzsch (1700–1861), whose life was largely devoted to Homeric studies. He differed from Wolf in regarding the actual Homer as living near the end of the poems, and therefore the shaping artist; while he makes the point that the Cyclic Poets implied the existence of an Iliad and an Odyssey somewhat in their present form.

Better known, in foreign countries at least, was Karl Friedrich Nägelsbach, and most of all for his treatise on Latin style (*Lateinische Stilistik*), which appeared in 1846, and reached its ninth edition at the hands of Iwan Müller (1905), who gave it a complete index, and thus greatly added to its usefulness. The book deals with the most characteristic differences of idiom between Latin and German prose.

Lobeck and Karl Lehrs carried on grammatical studies relating to the Greek from the beginning of the decadence (300 B.C.) to the Byzantine Age. As a critic, Lehrs treated

the text of Horace very severely, many of whose odes he even rejected as spurious! An early pupil of Hermann was Friedrich Wilhelm Thiersch (1784-1860), a lecturer at Munich, and doing much for the organisation of the educational system of Bavaria. He had studied the art of the Louvre and the British Museum, and therefore gave much attention to antique sculpture. It was due to him that the Glyptothek was founded at the Bavarian capital by the Crown Prince. Thiersch, however, rightly belongs to the list of grammarians, and besides two Greek grammars, he wrote innumerable treatises on the nicer points of word-formation and the particles. He was fairly intimate also with modern Greek, and wrote in French a treatise on the Greece of to-day. Other professors at the Bavarian university were Georg Anton Friedrich Ast (1778-1841), editor of the Characters of Theophrastus; Leonhard Spengel, Carl Prunst (1820-1888); and Ludwig Doederlein, professor at Bern and Erlangen, and noted for his forcible and stimulating lectures, full of epigram, and for his rather unmethodical treatises on synonyms and etymologies in Latin (Lateinische Synonymen und Etymologien, 6 vols.; Lateinische Synonymik, etc.), the first of which was published in 1826-1838, and the second in 1839.

Grammar was still the subject that attracted Karl Wilhelm Krüger (1796–1874), whose Greek grammar in two parts has its rules clearly stated and its examples

always pertinent. This book was rivalled by that of Raphael Kühner (1802–1878), and the trio was completed by Heinrich Ludolf Ahrens (1809–1881), the author of an exhaustive treatise on the Greek dialects (Göttingen, 1839–1843). Many of the papers of Friedrich Wilhelm Schneidewin, the editor of several Greek dramatists, show that he, too, though given to criticism as Hermann was, and to archæology as was Thiersch, was a grammarian in the sense that we now employ the word.

But Syntax led to another sphere of labor with Gottfried Bernhardy (1800-1875), who, in 1829, published a volume on the scientific syntax of the Greek language, but regarded syntax solely in its relation to the history of Latin literature. As professor at Halle (where he was afterwards pro-Rector) he published a very interesting monograph on his own system of classical learning (1832), which is very suggestive and full of truth. According to him, grammar is the instrument of such learning, and Criticism and Interpretation its elements. Of less account and purely ancillary are Antiquities, Palæography, Numismatics, and Epigraphy. In this, Bernhardy may be said to have set forth the whole truth regarding classical study when regarded from the standpoint of a wise and widely read scholar who applies philosophy to the subject that is dearest to him. In Bernhardy one sees alike the influence of Hegel and of Wolf. He carries out his principles in two books which were the first of the kind to place the study of classical literature upon a very high level.¹

Following Bernhardy, an excellent work on Roman literature 2 was prepared in two volumes by Wilhelm Sigismund Teuffel of Tübingen (1820–1878). This work is not intended for continuous reading, but is a sort of glorified bibliography with notes. It was at first vilely translated into English by W. Wagner, and later its fourth edition, having been enlarged and supplemented by L. Schwabe, was well rendered into English by G. C. W. Warr (1845 and 1901), who added the more important English and French references which the Germans had insolently omitted. This is a book of great value to the student of Latin for the easy access which it gives him to many details relating to Roman authors and their books. Closely linked with another valuable work of reference is the name of Teuffel, who assisted the completion of the great Real-Encyclopädie of August Pauly (1796-1845), a monument of minute information regarding Greek and Roman topics, which, begun at Stuttgart in 1830, was finished after Pauly's death.3

¹ Grundriss der römischen Litteratur (1830, 5th ed., Brunswick, 1872); Grundriss der Griechischen Litteratur (1836–1845; 4th ed., 3 vols., 1876–1880). There is a Life of Bernhardy by Volkmann. It describes his other works, such as his Suidas (1853), his rivalries with M. H. E. Meier and Theodor Bergk, and his fatherly friendship for his pupils, such as Heinrich Keil and August Nauck.

² Geschichte der römischen Litteratur (1870), last Eng. trans., 1900.

⁸ New ed. by Georg Wissowa (1902).

Grammatical studies were further pursued by Karl Gottlob Zumpt (1792–1849), whose grammar of Latin prose (1818) was several times translated into English and was circulated in the British dominions as well as in the United States; by Karl Leopold Schneider (1786–1821), whose large grammar was the first systematic treatise of the kind produced in Germany; Nicolai, Meisterhans, R. Klotz, J. F. Jacob, editior of the Ætna, and Albert Forbiger (1798–1878), a second-rate scholar, but one whose pedestrian editions of Vergil and Lucretius were better known in England than those of Heyne and Lachmann. Forbiger was also the compiler of a German-Latin dictionary.¹

¹ Lexicography, being an elementary part of grammar, may be considered here in its later developments, with a reference to early lexicography on pp. 96, 97, 108, 126, 165-167, 194, 246, 247, 254, 255, 305. Soon after the Renaissance began to make word-books and various kinds of lexica popular, one Ambrogio Calepino (Ambrosius Calepinus) had prepared a Dictionarium which was widely used. because it defined the Latin words in Italian and later gave also the equivalent in Greek. The success of the so-called Calepinus was extraordinary. It was republished, revised, amplified, and extended in every possible way, the definitions being given in many languages, so that finally there was produced a Calepinus with the Latin defined in Italian, German, French, Dutch, Danish, English, and Greek. The vogue of the book, thus altered, continued into the eighteenth century, when still another revision was undertaken at Padua by Iacopo Facciolati, who soon became convinced that the whole work was antiquated. He proposed that an entirely new lexicon be made out of the great body of Latin authors; and this was finally done by himself and his colleague Egidio Forcellini, in The broadly scientific study of language which is variously known as Linguistics (*Linguistik*), or Comparative

their Totius Latinitatis Lexicon (Padua, 1771), a splendid memorial of classical scholarship. This was revised by Vicenzo De-Vit (1879) and Fr. Corradini (d. 1888), who used the work of Klotz, and whose lexicon was completed after his death (1890) by Perin. It has been said of this great lexicon as made by Facciolati and Forcellini, so fully have they illustrated their articles by quotations from the classics, that the greater part of Latin literature could be restored from their lexicon, were it destroyed in the texts where we now find it. Other lexicons than those of the Italians have been independently made by Wilhelm Freund in Germany (enlarged and translated in the United States by E. A. Andrews) and made the basis of Lewis and Scott's Latin Dictionary (1882). This was "conveyed" by the English publisher, William Smith (afterward Sir William), and is known in England as Smith's Latin Dictionary. Independently, Karl Ernst Georges (1806-1895), of Gotha, produced a German-Latin lexicon in 1833, and it was accepted at Jena as the equivalent of a doctor's dissertation. A seventh edition appeared in 1882, as did (in 1870) the seventh edition of another lexicon which bears the name of Georges, but which is based upon the work of other scholars, such as Luneman, Forcellini, Gesner, and Scheller. Georges had ill health and weak evesight, so that he did not often go far from his library; but he generously put his stores of learning at the disposal of scholars in every part of the world. Besides the books already mentioned he wrote a Latin-German and German-Latin Handwörterbuch and a Schulwörterbuch, both of which have gone through many editions. The most ambitious attempt at a Latin lexicon was that planned by Eduard Wölfflin, professor at Munich. As early as 1857, the king of Bavaria offered to contribute ten thousand gulden toward the cost of a truly complete dictionary of Latin. It was proposed to put the editorship into the hands of Carl Halm of Munich, Ritschel, and Alfred Fleckeisen, with Franz Bücheler of Bonn as editor-in-chief. Political disturbances delayed the enterprise until finally Wölfflin began the publication of his Archiv für

Philology, began with the discovery of Sanskrit by Sir William Jones, already mentioned (p. 383). The greatest

lateinisch Lexikographie und Grammatik (in 1848), a quarterly for collections and suggestions from scholars all over the world. In 1893 the Archiv announced a plan for a great Thesaurus in 12 vols. of 1000 pages each, to be finished in twenty years at a cost of \$150,000, and under the charge of the academies of Berlin, Göttingen, Leipzig, Munich, and Vienna. Professor Bücheler, Wölfflin and F. Leo were the first editors. It was to appear in fasciculi.

Greek lexicography reached its highest excellence with the dictionary of Stephanus (see p. 305), yet, as with Latin, there was felt the need of lexicons that should define Greek words in the language of the students using them, instead of in Latin. Faber, in 1571, had published a Thesaurus; but, using that as a basis, J. M. Gesner, between 1726 and 1735, issued two revisions, and now he set forth a Thesaurus of his own, eliminating barbarisms and solecisms, and though uneven in its treatment and explanation, it marked a distinct advance in the history of lexicography. Gesner was noted as a leader in the New Humanism. The Old Humanism of the Renaissance had sought to prolong the life of the Latin language and literature. Yet this was found to be impracticable as a spoken tongue, and the so-called School of Halle abandoned the attempt, and merely tolerated the teaching of spoken Latin in the schools. But the New Humanists, headed by Gesner at Göttingen, held that the classics had a psychic and philosophical value which made the study of them peculiarly helpful, in leading to a broader and richer understanding of the modern literatures and of their art and poetry and every phase of learning. This view was that which bore fruit in the æsthetic teachings of Winckelmann, of Lessing, and of Goethe. Gesner was also the precursor of Heyne in letting taste play a part in his exegesis and commenting upon the authors whom he edited (Scriptores Rei Rusticæ, Quintilian, Pliny's Letters and Panegyricus, Horace, and Claudian). Others of the New Humanists were Tobias Damm (1699-1778), a teacher in Berlin who compiled a great lexicon to Homer and another to Pindar, the words being etymologically arranged (alphabetically by V. C. F. Rost in 1833).

achievements in this department of Classical Philology have been made by Germans or in Germany. Sir William Jones drew attention to the likeness of the structural system of Sanskrit and what we now call the Indo-European languages; but it was Franz Bopp (1791–1867) who gave a scientific turn to the discovery. Bopp was born in Mayence, lived in Paris (1812–1815), where he studied Persian and Arabic under de Sacy, and himself learned Sanskrit from the grammars of William Carey (1806) and Sir Charles Wilkins (1808). In 1821 he became professor, and held his chair for fifty-six years down to his death. In 1816 he published his first work

Johann Gotllob Schneider (1750-1822), of Breslau, whose lexicon supplied a model for those of Franz Passow (1819-1824), as Passow's did for Rost and Palm (1841-1857), and this in turn for that of the Englishmen Liddell and Scott (1843), the last edition (1880) bearing on its title page also the name of Henry Drisler, an American Hellenist of Columbia College, New York, who had himself made an independent lexicon of Greek, including proper names. Messrs. Liddell and Scott were scholars of very unequal capacity. A popular rhyme in England runs as follows:

"This is the book of Liddell and Scott, Some of it's good and some of it's not, That which is good is Scott, That which is Liddell is not!"

The first appearance of Liddell and Scott's lexicon in 1843 was, however, noteworthy, because its definitions were given in English and not in Latin — an innovation for which the editors gave a very noble defence in their preface.

¹ See Lefmann, Franz Bopp, sein Leben und seine Wissenschaft (Berlin, 1896).

on the conjugational system of Sanskrit as compared with those of Greek, Latin, Persian, and German, endeavouring to explain the origins of our grammatical forms. This he discussed more freely and fully in his Comparative Grammar (Vergleichende Grammatik), which appeared in 1833. Bopp made much of "roots" and more legitimately of conjugational similarities in the languages named. But when he wrote he was in advance of his time. Sanskrit was still imperfectly understood, and therefore Bopp's earlier contemporaries, such as Hermann and Lobeck, held aloof, while some, like Ludwig Ross, even treated Comparative Grammar as a subject for witticisms.

Theodor Benfey, a converted Jew (1809–1881), gave an intense devotion to the study of Sanskrit, of which language he wrote a complete grammar (1852), having previously published a lexicon of "Greek roots" (1839–1842) and very many articles and monographs on scientific Greek etymology. After Bopp and Benfey, the two great pioneers in the comparative study of languages, there came many, of whom Georg Curtius (1820–1885), at Leipzig, was the most influential — the head of a school of language study.¹ Curtius, whose elder brother Ernst won fame for a history of Greece (1857–1867),² in his inaugural, declared

¹ See J. M. Edmonds's *Comparative Philology* (Cambridge, 1906). Leo Meyer, who was a pupil of Benfey and did much to further his work, is at the present writing still living as an honorary professor at Göttingen.

² Eng. trans. by A. W. Ward (1873).

that he should bring Classical Philology and language study into closer relation with each other. This he accomplished by his own influence and that of his many distinguished pupils—ten volumes of Studien (1868–1878) with five volumes of Leipziger Studien (1878-1882) being edited by himself and his colleagues. The chief works that were wholly his own were his Greek grammar for schools (Prague, 1832), principles of Greek Etymology (1858-1862), and his bulky treatise on the Greek Verb (1873-1876). In his etymological discussions, Georg Curtius investigates and classifies the regular phonetic changes in the consonants as they pass from Sanskrit to Greek, Latin, or German; but many of these changes are irregular and not in accordance with any settled principle known to Curtius at that time. So he dubs them "sporadic changes," to be explained or not, according to the ingenuity of the investigator. In other words, he held that the exceptions to the consonantal changes set forth in Grimm's Law were "sporadic" and really accidental.

What was Grimm's Law? It is a law as to the relations between the consonants in (1) Sanskrit, Greek, and Latin, (2) High German and Low German (including English). The germ of this law was discovered by Rasmus Kristian Rask (1787–1832), who had travelled extensively in Iceland, Sweden, Finland, Russia, Persia, and India, carefully comparing the different languages spoken in these

¹ See Giles, Comparative Philology, § 99 et. al.

countries. It was he who, first among Europeans, came to know grammatically the Old Persian form of speech that is variously called "Zend" or "Avestan." Rask's book on Icelandic and other languages (1818) partly anticipated the law which generally governs the consonantal changes already mentioned. Jakob Grimm (1785-1863) who was preparing a German grammar, saw at a flash the great importance of Rask's statements; and when the second edition of his Deutsche Grammatik appeared (1822), it showed the influence of Rask. Hence the law of consonantal change came to be styled Grimm's Law; but the exceptions to it were regarded as inexplicable and as partly justifying the famous gibe of M. de Voltaire. Curtius with Grimm's Law and the "sporadic changes" reigned content, until a young Dane, Karl Ludwig Verner, who was not a classical scholar at all, wrote a paper in Kuhn's Zeitschrift,1 which showed that these exceptions were due to the accentual system of the original Indo-Germanic languages. That is, the sonant spirants, except p, f, h, w, and s, became respectively the spirants d, b, g, gu, and s when the vowel immediately preceding them did not, according to the original Indo-Germanic system, have the primary accent of the word. This gives proof of the prevailing "pre-accent" down to about 300 A.D. These two discoveries — that of Rask (Grimm) and of

¹ Vol. xxiii, pp. 79–130 (1877), entitled Eine Ausnahme der Ersten Lautverschiebung.

Karl Verner—are the most remarkable and have been the most fruitful in the study of languages since Classical Philology began. They were applied with great skill by Karl Brugmann of Leipzig, who may be styled the chief of the Jung-Grammatiker, among whom are numbered Hermann Osthoff of Heidelberg, August Leskien of Leipzig, Hermann Paul of Munich, and Ludwig Lange of Leipzig (1825–1885). The New Grammarians hold in general (1) that language-changes, so far as they are mechanical, occur according to definite and immutable laws, and (2) that the principle of Analogy, which is always at work, has been so ever since speech began.²

The Young Grammarians found a powerful ally in Friedrich Karl Brugmann (1849—), who coöperated with the others, and wrote a paper almost as revolutionary as Verner's, in Curtius's *Studien*.³ The subject was *Nasalis Sonans*, and proved so destructive to the theories of Curtius as to bring about a personal rupture between the two men; so that for many years Curtius and the **Old Grammarians** waged an unceasing war on Burgmann and his disciples. It is now universally accepted that Brugmann was correct in his view of the Indo-Germanic

¹ Paul's Principien der Sprachgeschichte (Eng. adapt. by Strong, Logeman, and Wheeler); and Brugmann's Grundriss der vergleichenden Grammatik der indo-germanischen Sprachen (Eng. trans.).

² See B. I. Wheeler, Analogy and the Scope of its Application in Study (1887).

⁸ Vol. ix (Leipzig, 1877).

vocalic nasals.¹ In fact, owing to the labors of Verner, of Brugmann (who finally succeeded Curtius at Leipzig), and the Young Grammarians in general, language-study has been put upon a sound scientific basis, wherein changes are to be traced, not to sporadic causes, but to analogy, which has laws of its own.

It was natural that so great a change in linguistics should be accompanied by a new movement in the field of grammar which sets forth, quasi-dogmatically, the truths of language-study. Hence we find the German influence exhibited by Johann Nicolai Madvig (1804-1886), a Dane of great distinction who was educated at Copenhagen. He became professor of Latin there (1829) and remained as such for more than fifty years. Like most of the greatest scholars whom the world has seen, Madvig was remarkably versatile, engaging as much in politics, law, and diplomacy as in classical study. He was a member of the Diet, President of the Council, Inspector of Schools, and Minister of Education. As a grammarian and critic his best work was done in Cicero, but his collective papers, Adversaria Critica, etc., are masterpieces of interpretation and criticism. His Latin grammar (1841) was translated in every European country and in the United States. His personality was remarkable. To his death, in his eightieth year, he was vigorous and full

¹ See Brugmann's great work, Grundriss der vergleichenden Grammatik der indo-germanischen Sprachen (Eng. trans., 2d ed., 1897).

of the scholar's zest, combined with the graceful poise of the diplomat who has mingled with kings and nobles. "Speak the truth in love" was his favourite maxim, and it was carried out to the letter. He taught all the scholars of modern Denmark and most of the Scandinavian countries. Among his pupils were Christensen, Sophus Bugge, and Johan Louis Bugge (1820–1905) of Christiania. As a critic, Madvig was less given than his contemporaries to the minute study of manuscripts, except in determining their relation to the archetype. He dwelt largely on verbal criticism, and was an adept in conjectural emendation. In his judgments he recalled the judicial methods of Niebuhr. Such was Madvig, a great classical scholar—a Grecian, a Latinist, a critic, a grammarian, and a brilliant man of the world.

To be compared with the Danish Madvig was the Dutch scholar, Caryl Gabriel Cobet (1813–1889), whose mother, however, was a Frenchwoman, and Cobet was born in Paris. He showed the brilliancy and wit of the French, though his education was carried out at the Hague and at Leyden. It is said that on entering Leyden he was already steeped in the ancient classics, and had a verbal familiarity with them. His doctor's dissertation excited high hopes, and the Royal Institute gave him leave of absence for five years so that he might study Greek manuscripts in Italy. On his return, he was made an extraordinary professor at Leyden, and his inaugural address has

become a classic in the field of text criticism.¹ The story is told that during one of the symposia of the professors, they fell to arguing on a certain point of usage in the Greek drama. Cobet was on fire with enthusiasm, and so pelted his colleagues with quotations from Æschylus, Sophocles, and Euripides and from the Fragments, that they gave way and admitted his claim. Then, with a roguish smile, he informed them that most of his quotations were spurious, that he had invented them on the spot as a bit of academic play. Not long after the retirement of Petrus Hoffman Peerlkamp, who had been full professor (1848) and who is best known by his critical work in Horace, Cobet succeeded him. He was the greatest Greek scholar of modern Holland. Dr. Sandys recalls the meeting of Cobet and Madvig at the tercentenary celebration at Leyden in 1875. A hush was felt when Cobet's turn came to address his great contemporary in Latin, for Cobet was first of all a Hellenist as Madvig was first of all a Latinist. But Cobet's words were full of grace, compliment, and dexterity, so that Madvig began his reply: Post Cobetum Latine loqui vereor.2 Cobet's most enduring work is to be found in the numerous lectures, papers, and examples of criticism that are contained in his Varia Lectiones and his Novæ Lectiones, which with Madvig's Adversaria and

¹ Oratio de Arte Emendandi (Amsterdam, 1840).

² Cobet did later (in 1877) criticise the Latin of Madvig. His own was superb, — flashing, graceful, sinuous, reflecting his remarkable personality.

Opuscula, and the addresses of Edouard Tournier (1831–1899), of Paris, might well constitute a Corpus of modern critical work.

The German influence on France in classical studies has been more subtle and less direct than upon other peoples, mainly because of the difference of race and the clash of politics, and also because of the French genius which creates and transforms in its own way. If less profound than the German, it is more lucid, and, one may say, more logical. Yet since the great discoveries were made by Germans or those allied with them, and since even in the department of Romance Philology the more minute and careful work has been done by Germans, the genuine scholars of France have accepted and merely elucidated what the Germans found. Because, however, they have lacked originality one passes over their later work with the mention of a few conspicuous names, such as those of men who wrote with charm - H. J. G. Patin (1792-1876), whose studies in the Greek and late Latin poets are learned and widely read; Désiré Nisard and Charles Nisard, who set themselves to making the classics popular even at the cost of inaccuracy; Émile Egger (1813-1885), author of the first treatise on Comparative Grammar (1852); the able lexicographers, L. M. Quicherat (1799-1884), author of a Latin thesaurus, and Emile Littré (1801–1881); the distinguished palæographer, Charles Graux (1852-1882), whose brief life was one of

¹ E.g. Dietz, Körting, Meyer-Lübke, Gröber.

remarkable achievement; and Otto Riemann (1853–1891), best known for his work in Livy. The French School in Athens was founded as early as 1846, and has helped to stimulate such archæologists as Burnouf, Fustel de Coulanges, Perrot, Collignon, Homolle, and Reimann, — with scores of others whose names are known to every scholar. Victor Henry (1850–1907) wrote comparative grammars that were translated into English, and his wide knowledge of all languages made him a universal authority. One of the most brilliant expositors of Roman life and Latin literature was Gaston Boissier (1823–1908), whose lectures were absorbing and whose books were fascinating (Cicéron et ses Amis (Eng. trans., 1892), L'Opposition sous les Césars (1874–1875), La Fin du Paganisme (1891), and L'Afrique Romaine (1895)).

Archæology in its broad sense and Fine Art owe less to Germany in their development than other branches of Classical Philology. To be sure, there is Winckelmann, the father of archæologists, and Lessing, his greatest critic, but scholars of other nations share the honours with these two illustrious men. We have seen how early the Arundel Marbles were admired in England, and how the British Museum was created for the repository of rare objects of antiquity. The Louvre in Paris was begun in 1204 and converted into the beginnings of an art museum by François I. Upon it were lavished all the genius of men like Pierre Lescot and Jean Goujin, and its beautification con-

tinued through the Napoleonic wars, during which the great Emperor filled the galleries with the richest spoils of the countries he conquered, as did his nephew Napoleon III. Its collections undoubtedly surpass in richness, beauty, and value those of any other structure in the world to-day. Even those of the Vatican must be reckoned inferior. Throughout France, the provincial museums exhibit separate collections, though it is becoming the policy of the government to draw these gradually to Paris.

Side by side with archæology stands history, and here the German influence is very great. There are in Germany editions of the Latin fragments by H. Peter, Friedrich von Schlegel, Johann Wilhelm von Süvern (d. 1820), while Karl Böttiger (1760) wrote Sabina, the daily life of a Roman lady, a model for Bekker's wellknown Gallus and Charicles (1796-1846). More serious historians of Rome were Ernst Curtius 1 and Theodor Mommsen² (1817-1903), of whom we shall have more to say. But in England there were giants of history,— Connop Thirlwall (1797-1875) and George Grote (1794-1871) — each having written a monumental history of Greece, Thirlwall's being called "a Tory history," and Grote's, "a Whig history," from the evident partiality of their respective authors. Thus, Thirlwall, a lecturer in Trinity, was in sympathy with the English patriciate, while Grote was a banker, not a university man, and fully in

¹ See the Deutsche Rundschau (Berlin, 1896).

² See *Infra*, pp. 443-444.

sympathy with the Athenian democracy. Of late years, a young Italian, Guilelmo Ferrero, has sought to throw a new light upon the problems of ancient Rome, though he seems largely to have drawn upon the French history of the Romans by Jean Victor Duruy. Other French classical historians have been Napoleon III, whose Casar deserves attention, François Villemain, a rhetorical lecturer, Aubin Louis Millen (1750-1818), who gave a remarkably full description of the Roman relics in the south of France; and Jean François Boissonade (1774–1857), who spent most of his time in studying the later Greeks, of the decadence of whom he modestly said that "the mediocrity of their talent was suited to the mediocrity of his scholarship." But his work was prodigious. In nine years (1823-1832) he produced twenty-four volumes of annotated Greek poets, and his was the editio princeps of Babrias (1844). We must note, also, though many names are omitted: Barthélemy St. Hilaire (1805-1895), lecturer on Greek and Roman philosophy, translator of Aristotle (1801), and publicist as well as scholar, besides the Duc de Luynes (1803-1867), numismatist and explorer, Charles Lenormant (1816-1881), a student of ancient monuments; and his son, François (1837-), a scholar of the most varied attainments, best known for his minute studies at Eleusis with reference to the Mysteries.¹

¹ In modern Italy, the name of Cardinal Angelo Mai (1782–1854) is to be remembered for his study of the manuscripts in the Vatican and

Since the splendid career of Cobet, the Dutch universities have had no classical scholar of the first order, but they honourably maintain the traditions of the past. They are Groningen (founded in 1614), Utrecht (1636), Leyden 1575), and Amsterdam, whose Athenæum was raised to the rank of a university in 1877. The greatest number of students is to be found at the oldest seats of learning,—Leyden and Utrecht. There were two more universities in Holland,—Francker and Hardervyk,—but these were suppressed by Napoleon I.

Belgium, as a separate state, is of recent existence, having formed a part of Holland until the revolution of 1831. It contains more than one famous and ancient

Ambrosian libraries of which he had charge. Some of his discoveries were of works hitherto unknown to exist, as a part of Dionysius Halicarnassensis, fragments of the lost Vidularia of Plautus, and remains of Cicero's lost treatise, De Republica (1822). Since Comparative Philology has been in vogue, Domenico Pezzi (1844-1906), and Graziadio Ascoli (1829-1907) are the greatest names among the comparative philologists of Italy. We have already mentioned Vincenzo De-Vit (1810-1892) as the reviser of Forcellini's great lexicon, and Fr. Corradini (1820-1898) whose like task was completed by Perin in 1890. Studies in early Latin were ably undertaken by Giovanni Battista Gandino (1877-1905); while Domenico Comparetti, professor of Greek at Pisa, is widely known by his account of Vergil in the Middle Ages (1873; Eng. trans. 1895). Luigi Canina, Bartholomeo Borghesi, and Francesco Maria Avellino were all distinguished archæologists; but first of all stood Giovanni Battista de Rossi (there were two of the name), who made collections of inscriptions, especially of those in the Catacombs, and of Christian Archæology.

university and is remarkable for the number of its learned societies. The Catholic University of Louvain was founded in 1426, having separate colleges, as in England. Of these the best known was the Collegium Trilingue, over which Erasmus for a time presided, cultivating the three languages, Hebrew, Greek, and Latin. Lipsius also lectured here and styled the University "the Belgian Athens." Louvain has had its vicissitudes, having been closed by the Austrian Emperor, Joseph II, and by the French in 1797; but in 1834 it was refounded as a strictly Catholic University and has resumed its old prestige. Besides Louvain, there are Ghent (1816), Liège (1816), and the "free university" of Brussels (1834). As Dutch scholarship tends toward textual criticism, so that of the Belgians has by preference turned to archæology and constitutional antiquity, these being represented chiefly by Jean Baron de Witte (1868-1889), a scholar largely influenced by the Germans; J. E. G. Roulez (1806-1878), Professor of Greek at Ghent, and an authority on ancient music; Joseph Gantrelle (1809-1893), Professor of Latin at Ghent, a defender of the classics and editor of the Agricola (1874), Germania (1877), and the Historia (1881), besides publishing a special study of the style of Tacitus (1882), to whom, indeed, he devoted his chief labours. The influence of Germany is plainly seen in the

¹Other Belgian scholars of note were Auguste Wagener (1829–1896), largely influenced by German teaching; Louis Chrétien

work of the Belgian scholars, because at so many of their universities, Germans have held professorships (e.g. J. D. Fuss; G. J. Bekker), yet the native Gallic strain has made Belgian scholars not only profound but lucid.

The Scandinavians, as we have already noted, are among the most original of classical scholars. It is unnecessary, however, to trace their work farther than the beginning of the nineteenth century, for it is only then that Danes, Swedes, and Norwegians became conspicuous for their prowess in learning. Their universities to-day are, first of all, Copenhagen (founded in 1478) and one of the most famous in Northern Europe; Upsala, in Sweden (1480); Christiania (1812), the Norwegian State University; besides Lund in Sweden (1666). The most famous Scandinavian scholars have been already named,—Rask, Madvig, Niebuhr, and Verner,—but several others now require attention.

Johan Louis Ussing (1820–1905) was the close associate of Madvig and was the most celebrated Scandinavian archæologist, writing his dissertation on the subject of

Roersch (1831-1891), of Liège, and noted for his valuable reviews and monographs; Félix Nève (1816-1893), of Louvain, orientalist by choice, but classicist by profession; Jean Joseph Thonissen (1816-1891), a jurist who wrote a long work on primitive criminology in Greece and Rome; and finally, Pierre Willems (1840-1898), author of a standard work on the political institutions of ancient Rome (Louvain, 1870), and another on the Roman Senate.

Greek vases. He travelled for two years in Greece and Italy and founded the Museum of Classical Archæology at Copenhagen, where he was made Reader. The influence of Madvig led him to more closely philological work, so that he took part in editing Livy and annotated Plautus on his own account (1875-1887). As a text-editor he was conservative, unlike most Scandinavians, who are possessed of a cacoëthes emendandi, of which the Swedish Ljundberg furnishes an awful example in his edition of Horace (1872), where out of all the lines he has left barely sixty unaltered (Reinach). In Iceland, there arose one splendid scholar, Sveinbjoin Egelsson (1791-1852), whose thunderous translations of all Homer unite a fire and splendour that rival the Sagas of the North, while they recall them. Esaias Tegnér of Lund (1782-1846), the most popular poet in Swedish literature, so that in 1808 he was, to quote Dr. Sandys, "the Tyrtaeus of Sweden," was professor of Greek, but insisted more on Latin, while Karl Vilhelm Linder (1825-1882) was a strenuous advocate of Greek.

Sophus Bugge (1833–1907) not only investigated consonantal changes, studied Latin under Madvig, in Berlin, Sanskrit under Weber and Bopp, and Germanic philology under Haupt, 1 but he investigated further the principles of

¹ Moritz Haupt (1808–1874) was a pupil of Hermann, whose daughter he married. His was a vigorous, impetuous personality. He is said to have taught Nettleship in his lectures the value of Bentley. He himself learned from Hermann's Bacchæ what is meant by "really understanding an author." He was appointed

Verner's Law. He is mentioned here, however, because of his criticism of a very important work which caused a revolution in Latin studies everywhere. Wilhelm Corssen (1820-1875), a teacher at Schulpforta, undertook an acute and accurate investigation of the sounds of the Latin language. Materials for this work had been gathered by Albert Benary (1807–1860), while further notes had been made by Friedrich Ritschl (1806-1876) in his Plautine studies. But no preceding scholar had made Latin phonetics a definite object until Corssen appeared with his Ueber Aussprache, Vokalismus und Betonung der lateinischen Sprache.1 In it, Corssen sought to study the sounds (i.e. the pronunciation) of the Latin language, using not only the earliest literary sources, and the most ancient inscriptions, but also the Italic dialects such as Faliscan, Oscan, and Umbrian, with a vast collection of quotations from the Roman grammarians, whose work had been little studied. All these means of information Corssen used with scholarly ability, and his results as to phonetics have stood the test of time, so that his book is definitive. It was needed, for the confusion in the pronunciation of Latin had become great. There was no standard, and there had been none since the time of the Protestant Reformation.

after Lachmann's death to fill the latter's chair at Berlin. Though his Fach was Germanic philology, the list of his published works on Greek and Latin is a very long one.

¹ Published in 1858–1859 at Leipzig, where it received a prize for scholarship; reëdited in 1868–1870, 2 vols.

Each nation had pronounced Latin as though it were its own language, and while on the continent of Europe this was of no great consequence, since the vowel sounds were generally the same, it shut Englishmen, and later, Americans, away from using Latin as an intelligible medium of speech. Lipsius, Cardinal Wolsey, and Milton had all complained of this, but there was no one to guide men until Corssen appeared, spurred by the necessity imposed by the new science of Comparative Philology. He showed clearly the phonetic basis for the "Roman" system, and after some grumbling, every university has adopted it. In England it met with much opposition from the public schools, and even to-day it is not commonly employed; though in the universities and in advanced work it is not only accepted, but taught. In the United States, where colleges have been founded from many countries, Corssen's authoritative statements were soon received, because it gave to students one single, accurate pronunciation instead of many inaccurate ones; so that to-day the phonetic system is universal both in school, college, and university.2 Curiously enough the phonetic system had been anticipated by an American of German parentage, Dr. Haldeman, of Philadelphia, though he had

¹ See the more recent English grammars of Latin, such as Kennedy's, Roby's, and the luminous work of Lindsay, *The Latin Language*, (Oxford, 1894), chh. 2-4.

² The standard work on Latin pronunciation is that of Seelmann, Ueber die Aussprache des Latein (Stuttgart, 1885).

access only to the Latin grammarians and to written literature rather than to dialects and inscriptions. This book is entitled Elements of Latin Pronunciation (1851), and was finished before Corssen's work appeared. An independent attempt to reach the same end was made by Professor Richardson of the University of Rochester, and he did arrive at many of Corssen's results (1859), though differing from him grotesquely in other conclusions. Corssen spent the last years of his life in Rome, where he died, it was said, of disappointment and chagrin. His Aussprache to this day is an authority. Flushed by his success, however, he undertook the task of solving the problem that still awaits solution, — the origin and linguistic affinities of the Etruscans, that strange people who lived in Italy and at one time conquered the greater part of it, yet who, in appearance as in language and customs, were like neither the Latins, the Umbrians, or the Oscans, but suggested an oriental origin. Corssen resolved to dispel this mystery. In his colossal work, Ueber die Sprache der Etrusker, he lavished all the powers of his intellect and all the vast materials at his command. For a moment, so great was his prestige, the learned world believed that he had succeeded, yet criticism soon showed that he had failed, and he went down to his death with the sneers of his late friends to smooth the way.

¹ Leipzig, 1874-1875, 2 vols. See Deecke, Corssen und die Sprache der Etrusker (Stuttgart, 1875). Deecke edited the Etrusker, in 1877.

Practically all that is known about the Etruscans was known before Corssen turned his attention to the subject. In 1826, the Royal Society of Berlin offered a prize for the best essay on the Etruscans. In 1828 an elaborate monograph on the subject was presented by Karl Otfried Müller 1 (1707–1840). Already Müller had done much. He had felt the influence of Niebuhr and had studied under Boeckh at Berlin, and both had aroused his interest in historical topics. A monograph on Ægina and the Æginetan marbles was his first published work, and in 1819, at the age of twenty-two, he was made Professor of Classical Learning in Göttingen, where he lectured on Archæology and art. His book upon the Etruscans contains all that was known until recent years. He did not attempt to establish a theory, like Corssen, but only to present the facts and to make suggestive comments; and that is all that can be done down to the present day. Müller was interested in mythology, religion, literature, and upon especial classical authors, such as Pindar, Æschylus, and Herodotus among the Greeks, and among the Romans, writers of the Silver Period. In 1833 an edition of the Eumenides with dissertations on the manner of presenting the play and its purport, caused much interest, as shedding new light on the Greek theatre; and the author was not disturbed when even Hermann called him "mistaken"

¹ His real name was Karl Müller, but as this was and is so frequent in Germany (like John Smith in England), he inserted the "Otfried."

and "presumptuous." He at once edited the fragments of Varro, De Lingua Latina, and later of Festus. died at Athens and was buried there (1840). He had done much for historical research and for the methods of Niebuhr. His acquaintance, Friedrich Gottlieb Welcker (1784-1868), who long survived him, turned more to the artistic manner of interpretation. He early studied at Rome; he was professor at Giessen (1808), he fought as a volunteer against Napoleon (1814), and was afterwards again a professor, first at Göttingen and then at Bonn, where he presided over the first Museum of Ancient Art ever known. His lectures were stimulating by reason of his personality, and his reach was broad, including both Greek and Latin poetry and the mythology of Greece. He made numerous translations, wrote monographs on many subjects, and is especially known by "Welcker's Cyclus," or Greek Tragedies in Relation to the Epic Cycle.1 It has been said of him that his chief strength lay in interpretation, while that of K. O. Müller was in historical research.

A contemporary of great fame was Otto Jahn (1813–1869), also given to archæology. He was at various times professor at Greifswald (1842–1847), at Leipzig (1847–1851), at Bonn (1855–1869). He died at Göttingen. Though an archæologist and the author of many monographs, he will be longest remembered by his critical revisions of Persius (1843) and Juvenal (1851), with an

¹ 3 vols., 1839–1844.

edition of both in the year before his death. For text-books he edited the Cupid and Psyche of Apuleius, the Athenian Acropolis from Pausanias, the Electra of Sophocles, the Symposium of Plato, and the Treatise on the Sublime ascribed to Longinus. It would be impossible here to enumerate his minor treatises on artistic subjects, whose very titles fascinate and attract.¹

Classical literature treated either with deep learning or with distinction was a subject for study at all times, though the Germans are not happy, as a rule, in that which requires the æsthetic as well as the historic element. We have already mentioned Bernhardy as an historian of both the two great literatures. K. O. Müller began a history of Greek Literature at the request of the London Society for the Diffusion of Useful Knowledge, in 1836, but he died before its completion. The full text was not published in English until 1858, when Dr. J. W. Donaldson finished it in a three-volume edition. Yet much has been done for classical literature by German scholars, many of whom translated, and others wrote special monographs on particular authors, such as the illuminating papers on Plautus (Parerga) by Friedrich Ritschl (1806-1876), who also wrote of the literary activity of Varro and the laws of the

¹ Latin archæologists are Conrad Bursian (1830–1883), the historian of classical studies in Germany; Otto Benndorf (1838–1907); Peter Willen Forchhammer (1801–1894), the topographer; and **Heinrich Kiepert** (1818–1899) the well-known cartographer, Professor of Geography at Berlin, and maker of many maps and charts.

Saturnian verse.¹ More strictly historians of literature were J. A. Fabricius (1668–1736), who condensed and compiled the whole of the classic writers, without whose aid no subsequent history of either Greek or Latin has been written; Teuffel, already mentioned; and Otto Ribbeck (1827–1898), professor successively in five universities, but passing his last years at Leipzig. To him we owe much of the history and criticism of the early Latin dramatists, whose fragments he edited (3d ed., 1897–1898), a study of Roman tragedy under the Republic,² with editions and conservative texts of Vergil, Horace, and Juvenal. His most interesting work is his history of Roman poetry.³

Since the Middle Ages, some lost fragments of important authors have been discovered. Such is the long episode of the *Cena Trimalchionis* from the Latin novel of Petronius, edited by Friedländer; the so-called *Anthologia Palatinas*, already mentioned; quite recently, fragments of Bacchylides (ed. prin. Kenyon); Babrius (122 fables,

¹ He is best known by his monumental edition of Plautus in conjunction with Gustav Löwe, Georg Götz, and Friedrich Schöll. Ritschl himself edited and reëdited nine plays (1848–1854), and his three coadjutors were assisted by Alfred Fleckeisen (1820–1899), Wilhelm Studemund (1843–1889), who also was a noted Greek palæographer, Wilhelm Wagner (1843–1880), and especially in the prosody by the researches of Wilhelm Corssen, already mentioned.

² 1875.

² 3 vols., 1859–1868; abridged, 1895. See a volume compiled by his friends, Otto Ribbeck, Ein Bild (1901).

ed. prin. Boissonade); a lost treatise by Aristotle on the polity of the Athenians (ed. prin. Kenyon); ¹ and fairly complete plays of Menander (ed. Lefebvre in 1907, Headlam in 1908); with seven poems of Herondas (ed. prin. Kenyon, last ed. by Creuzer, Leipzig, 1894). It is believed that the papyri of Egypt will yield new treasures, as they have in the past five years, and scholars look eagerly for other plays of Menander, some of the exoteric works of Aristotle, and it may even be the famous lost books of Livy.

Archæology (to revert to a subject already spoken of) has been greatly enriched by the compilation of corpora to each of the classic languages. With the aid of Epigraphy, a collection of Greek inscriptions has been made by Boeckh, who edited the first two volumes of the Corpus Inscriptionum Gracarum (1825-1843), followed by other volumes by Franz (1845-1853), the fourth by E. Curtius and A. Kirchhoff (1826-1908), and the whole completed by the Index of H. Rochl (1877). Assistance was given to the work by Wilhelm Dittenberger (1840-1906), professor at Halle. He did much also for the Corpus Inscriptionum Atticarum (1878-1882), and prepared himsef a Sylloge of Greek inscriptions that are especially important (1882, 2d ed. 1898-1901). Apart from his epigraphical work, Dittenberger was a specialist in Cæsar, having prepared eleven editions of Kraner's Commentary. Georg Kaibel (1849-1901), editor of the

¹ See Gilbert, Greek Constitutional Antiquities, 1895.

Electra of Sophocles (1896) and of Athenæus (1886–1890), collected a volume of some 1200 epigrams (1878) copied from stones (ex la pidibus) and covering a thousand years.¹

Latin Epigraphy was pursued in a desultory way for a long time, chiefly in Italy. The Romans do not appear to have collected inscriptions as the Greeks did. It was only at the beginning of the Middle Ages, when Rome became a Christian Mecca, that pilgrims copied some of the most famous inscriptions to carry home. With the Renaissance came a genuine interest in them as in gems and carved work. Cola di Rienzi (about 1344) prepared a topographical account of Rome, in which he drew largely on inscriptions; while Poggio Bracciolini² collected them. Unfortunately, many were forged,3 and some of them have only recently been stamped as spurious, mainly from the unscrupulous hands of Pirro Ligorio of Naples. The first printed collection of inscriptions seems to have been that of Ravenna (1489). For Gruter's great work the reader is referred to another place.4 The study was taken up by others, among them Raffaele Fabretti (1618-1700), but it was L. A. Muratori (1672-1750) who gave a great impulse to Epigraphy by his Novus Thesaurus Veterum Inscriptionum (4 vols., Milan, 1739-1742), and to Palæography by his researches in Milan

¹ Other noted Greek epigraphists were Köhlen, — and outside of Germany, Œconomides, Dobree, Riemann.

² Supra, pp. 276-9. ³ Supra, pp. 284-5. ⁴ Supra, p. 342.

and other seats of learning. Bartolommeo Borghesi (d. 1859) made epigraphy a science, and to him is due the splendid work that has been accomplished in this field. Both the French Academy and that of Berlin planned a vast Corpus of all existing Latin inscriptions, but this was not undertaken until 1863, when the first volume of the present Corpus Inscriptionum Latinarum appeared under the editorship of Theodor Mommsen and Wilhelm Henzen (1816–1887). The work has steadily progressed, volume by volume, with supplements, but it will probably never be wholly finished, owing to new discoveries.¹

The greatest mind since Scaliger's, if not the greatest mind of all time, is recalled in the illustrious name of Theodor Mommsen (1819–1893). Like so many distinguished men of letters, he became famous for his versatility, so that in him we find the young poet, the ardent politician, the close student of inscriptions, the master of ancient constitutional law, and finally the historian of the Roman Empire, — chronologist, numismatist, and lyrist. It was he who made the plan for the splendid *Corpus Inscriptionum Latinarum*, in 1847, as against A. W. Zumpt, and to Mommsen the Academy entrusted the scheme as he outlined it.

¹ See the article "Inscriptions" in vol. xiii of the ninth edition of the *Encyclopædia Britannica*. It was written by Professor Emil Hübner of Berlin, himself a famous archæologist. On the *Corpus* especially see Egbert, *Latin Inscriptions*, pp. 6-15 (New York, 1896).

He came to write his History of Rome with a certain naïveté. While spending a vacation with his father-in-law, the old gentleman said, "Why, yes, Theodor, your studies have fitted you for just such a work." Young Mommsen flushed with pleasure, and at once began the history. Out of the fulness of his mind, he made no preparation, but just wrote on, chapter after chapter, book after book, and volume after volume, until, instead of composing a "popular" work, he had poured the wealth of his wide knowledge into a book which is informing in matter and brilliant in style. It aroused a storm of controversy, the more so as Mommsen had not thought it worth while to equip it with footnotes. These were given later by a sixth volume, and another book entitled Römische Forschungen.

The History of Rome is in reality a protest of New Germany against the old feudalism which Napoleon had failed to shatter. It pleaded for a brilliant dictator, and told the story of Julius Cæsar, the greatest man who ever lived, as the ideal head of a State. He lashed the weakling, Cicero, and wrote some of his papers with great flashes. No one has refuted him and neither Gisner nor Ferrero has made a satisfactory response. The climax of Roman grandeur comes with Cæsar; and Mommsen beholds a grandeur in the North, when the petty, ignorant squires of Junkerthum are scattered by an enlightened Dictator.

A picturesque figure among archæologists is that of Heinrich Schliemann (1822–1890), at fourteen a grocer's boy, at thirty-six an "Indigo King" in St. Petersburg with a fortune that grew every year. He then betook himself to archæology, teaching himself Greek, and reading carefully. He believed the site of Troy was on the hill of Hissarlik. The hill was opened (1870–1873), as he had Mycenæ explored (1874–1876), Troy again (1879), Archomenos (1881), and very successfully Tiryns (1885). Many excavations were made, quite enough to justify the Homeric story, and to shed light upon Thucydides.

Schliemann chose to live à la grecque for his own gratification. His house was constructed at Athens, and was embellished with mosaics, friezes, and illuminated Homeric quotations. He married a Greek wife, who bore him a girl whom he called Andromache, and a boy, Agamemnon. Even his porter was styled Bellerophon. Just as he was about to explore Crete, death came on him suddenly at Naples, leaving Dörpfeld to finish the Trojan discovery.¹

It may be said that all of Continental Europe felt the influence of the extraordinary range and originality of German scholarship; yet of England, until very lately, this has been less true. Great Britain has had her own ideals, her own traditions, and her own intellectual character, and her learned men have not interchanged

¹ See Schuchardt, Schliemanns Ausgrabungen, Eng. trans. (1890), containing a bibliography.

their acquisitions with any other country to the extent that even Spain and Portugal have done. This has not been true of her greatest scholars, such as Bentley, for example, but in general the British distaste for foreigners has extended even to their learning. Hence the German influence in its full sweep is a thing of the past two or three decades, and has been shown in the persons of men still living, whose names are (except casually) excluded from this survey. A passage in George Eliot's Middlemarch, where young Ladislaw tries to make Dorothea see how backward is her husband, Mr. Casaubon, in modern scholarship, says:—

"If Mr. Casaubon read German, he would save himself a great deal of trouble. . . . It is a pity that it [devoted labour] should be thrown away, as so much English scholarship is, for want of knowing what is being done by the rest of the world."

"I do not understand you," said Dorothea.

"I merely mean," said Will in an off-hand way, "that the Germans have taken the lead in historical inquiries, and they laugh at results which are got by groping about in woods with pocket-compasses, while they have made good roads."

But Great Britain had a scholarship of her own, a scholarship of elegance, and again of sound truth. In Greek and Latin, as such, she surpassed all her rivals. No verse or prose in either language was so near the classical standards as that which came from Oxford or from Cambridge. The Italian school of Latinity with its Ciceronianism was near to that of England; while, for a time at least, the

critical work of the Netherlands was stimulated by the example of Englishmen. Names such as those of Bentley, Porson, Peter Elmsley (1773-1825), Thomas Gaisford (1779-1855), C. J. Blomfield (1786-1857), Paul Dobree (1782-1825), James Scholefeld (1789-1853), Charles Badham (1813-1884), J. W. Donaldson (1811-1861), who finished K. O. Müller's Greek literature, W. E. Jelf (1811-1875), George Long (1800-1879), John Conington (1825-1869), the first professor of Latin at Oxford, Henry Nettleship (1839-1893), who with Conington produced a definitive edition and translation of Persius, and William M. Leake (1777-1860) — all these were familiar to Continental scholars. More especial mention is due to one of the most brilliant men of his country, Sir Richard Claverhouse Jebb (1841-1905), who at the time of his death was professor of Greek at Cambridge. He was a witty, versatile man of the world, "a humanist in the highest sense of the word" (Sandys), who had no equal in his mastery of both classical form and spirit. Though not a stranger to drawing-rooms and polite society, he edited Sophocles (1883-1896) and Bacchylides (1905), translated Theophrastus, published an introduction to Homer, a life of Porson, of Erasmus, and one of Bentley, helped found the British School at Athens, and was a master of English prose and of Greek verse. It is impossible to overrate his combination of deep learning, so easily carried, with the easy tone of an accomplished gentleman.

Further mention must be made of Benjamin Jowett (1817–1893), Master of Balliol, who admirably translated into English, Plato (1871), Thucydides (1881), and the *Politics* of Aristotle (1885), both of the latter with commentaries. But perhaps it was Jowett's personality that must be taken into account. His influence over awkward and bashful undergraduates was remarkable, as it was with those of his own age. His pungent, witty, unexpected sayings will be remembered and quoted as long as his translations are read.

Mention has been made elsewhere of many noted British scholars. We must refer again to H. A. J. Munro (1819-1885) to note his splendid work both as an editor and translator of Lucretius, and because he gave "the first impulse to a reform in the pronunciation of Latin." And one must also mention the services which Great Britain has rendered to Classical Archæology in the work of the British Schools at Athens (1883-) and at Rome (1901-); Banks, Arden, Harris, carried on fruitful explorations at Herculaneum, resulting in the course of a century, in the rescue of important fragments of Epicurus, Philodemus, a part of the Iliad, speeches of Hyperides, and others already mentioned as recovered. And perhaps the extreme of minute commentary was reached by Professor J. E. B. Mayor (1825-1911) in his two volumes of closely printed notes on the Satires of Tuvenal (last ed., 1886).

¹ See Sandys, op. cit., iii. p. 433.

These and such as these are of the élite of British scholarship. Their names are known wherever classical learning exists. One is reminded of the story of how Gaisford when in Germany went to pay a call on Dindorf at Leipzig. The door was opened by a shabby man who resembled a servant; but when Gaisford's name was mentioned, rushed into his arms and kissed him.¹

If England felt only in the person of her most learned men the influence of Germany, the United States of America may be said not to have discovered Germany at all until within the memory of those still living. Settled at first by Englishmen, such rude culture as it had for more than a century was wholly English. The first institution of higher learning was Harvard College, now Harvard University, named from John Harvard of Cambridge, who gave half his fortune and all his library to the college that was to bear his name (1638). In age, among American homes of scholarship, the College of William and Mary, chartered by those sovereigns in 1693, comes next to Harvard; ² and in order, during the colonial period, are Yale (1701), so named in 1718 after one Elihu Yale; Princeton

¹ Tuckwell, p. 131.

² Dr. Sandys (op. cit., iii. 452) oddly omits this venerable seat of learning, which has existed down to the present time, and among whose graduates have been four Presidents of the United States, the most learned of our Chief Justices, and one of the most brilliant of our soldiers (General Winfield Scott). He makes Yale to have been the second college established in the United States.

(1746); the University of Pennsylvania in Philadelphia, originally an academy, assisted by Benjamin Franklin (1751); in New York City, King's College, chartered by George II (1754), but renamed Columbia College in 1787, and Columbia University in 1890. Brown University was established in Providence, Rhode Island, in 1764. These five centres of the higher education were all in existence before the Revolution. There are now in the United States more than four hundred institutions that call themselves colleges or universities, but barely a score satisfy the definition. In general it may be said that the older colleges that have become universities deserve the name, and are splendidly equipped with the most modern apparatus for research, with specialists trained in Germany or in other foreign countries to satisfy the most exacting seeker after knowledge; while the newly founded ones are still to prove their right to scholarly esteem.

It must be noted, however, that this statement is only general. Some of the youngest universities, like Chicago, (1892), Johns Hopkins (1876) in Baltimore, Leland Stanford at Palo Alto, California (1891), Cornell at Ithaca in New York (1865), were nobly endowed by the generosity of some very wealthy men. The Clark University in Worcester, Massachusetts, admits no undergraduates, but gives all its energy to intense specialisation. All these newer universities are modelled mainly on the German, while the

older ones still retain in large measure the traditions of English scholarship.

There was scarcely any standard but the English standard known prior to the nineteenth century, and the wide separation of the United States from Europe made this natural enough; but it led to a sort of intellectual dry-rot. The first American to study in Germany was George Ticknor (1791–1871), afterwards Professor of the French and Spanish Languages and Literatures at Harvard. He spent four years divided between Göttingen, Leipzig, Halle, and Paris, visiting also Weimar, Naples, and Rome, and meeting some of the most eminent scholars of his time.

In like manner, Edward Everett (1794–1865), afterwards President of Harvard, and Professor of Greek, spent four years (1815–1819) abroad. On returning, he said: "In regard to university methods, America has nothing to learn from England, but everything to learn from Germany." George Bancroft (1800–1891), the long-winded historian of his own country, was another of those sporadic pilgrims whose isolated enthusiasm bore no fruit because the American people were not ready for it. Let us add to the list C.C. Felton, Professor of Greek at Harvard, who annotated Wolf's text of the *Iliad*, and wrote a singularly naïf account of his travels in Europe. T. D. Woolsey of Yale was a more able and active scholar, and more deserving of regard. He edited a number of Greek texts with a fair comprehen-

sion of their meaning.¹ Harvard possessed two foreignborn professors whose influence was felt, as was that of the poet Longfellow (1807–1882). These were E. A. Sophocles (1807–1883), who wrote a Greek grammar of the Roman and Byzantine periods, Carl Beck (1798–1866), a German by birth. His pupil, G. M. Lane (1823–1897), was Professor of Latin for thirty-three years. After his death, a Latin grammar upon which he had long laboured was finished and seen through the press (1898) by his former pupil, Professor M. H. Morgan.

Many American grammars were published in this period, the more popular being those of Albert Harkness, Professor of Latin in Brown, often revised; ² Allen and Greenough; ³ Gildersleeve, ⁴ Gildersleeve-Lodge, ⁵ Hale and Buck, ⁶ Bennett ⁷ and especially a grammar little known, but made on a theory of his own, by Gustavus Fischer, who resigned the chair of Latin at Rutgers College in order to pursue this work. By an unfortunate fatality, the whole edition of this learned work was, with its plates, destroyed by fire, so that a copy of it is a very rare possession.

The true spread of the influence of German learning in America is due to Charles Anthon (1797–1867) of Columbia College, who was himself of German descent. He produced a large number of annotated editions of Greek and Latin

¹ For a criticism of American colleges at this time, see Bristed, Five Years in an English University (New York, 1855).

² 1898. ³ 1904. ⁴ 1875. ⁵ 1905. ⁶ 1903. ⁷ 1908.

text-books, in whose commentary he drew freely upon the best German sources. For the fulness of his annotations he was severely criticised, but the extent of them was in reality due to the lack of knowledge among classical teachers who had never heard of Döring or Jahn, or even Bentley. Anthon's texts were very widely circulated, as were his handbooks on geography, mythology, prosody, grammar, besides a Latin lexicon. In this way, the teachers as well as schoolboys came to know something that was more accurate and broader than the New England horn-books which had done duty for too long. Anthon may, therefore, be regarded as the first American to bring the German influence to bear, and he could do it the better because the events of 1848 in Germany had driven to the United States thousands of involuntary emigrants. So, Columbia University has the honour of securing the services of Franz Lieber as an expounder of international law; and of initiating the study of archæology by the labours of Augustus C. Merriam (1843-1895), who worked hard for insufficient recognition, and who died at Athens, where he is now buried. Finally, it is an interesting fact that each of the two lexicons officially adopted at Oxford and Cambridge should be wholly or in part the work of

¹ Englishmen who sneer at him should remember that his books were pirated multitudinously by English publishers, and that his *Horace*, in particular, was used in all the English public schools, where they were wholly ignorant of German.

Columbia professors. The Latin lexicon by Lewis and Short tells that Charles Lancaster Short (1821–1886) was Professor of Latin at Columbia; while the Greek lexicon of Liddell and Scott, in the latest edition, acknowledges the services of Dr. Henry Drisler (1818–1897), who had collaborated with the English editors, and who held the Greek chair in Columbia.

The first university to be founded after German ideals was the Johns Hopkins, endowed by a gentleman of that name, and its first president, Daniel Coit Gilman (1831–1909), gave full swing to his Germanising tendency, so that in a few years he had gathered around him a group of scholars in the European sense and compelled the older universities to reform their methods. Johns Hopkins has been the alma mater of many able men, most of whom still live to do her honor. The American Journal of Philology, edited by Professor Basil L. Gildersleeve, is published there. Other studies and classical series emanate from Chicago (Classical Philology and the Classical Journal), as do Harvard Studies, Cornell Studies, etc., from other universities.

Profound scholarship was represented by William Dwight Whitney (1827–1894), Professor of Comparative Philology at Yale, who was a Sanskritist and student of language, widely known in Germany and wherever oriental studies are pursued. He was one of the four chief contributors to the St. Petersburg dictionary of Sanskrit;

his own Sanskrit grammar is a standard work; with the first volume of the Atharva-Veda-Samhitā (1855–1856), the second volume being completed by Whitney's former pupil, Professor Lanman of Harvard. Other professors of distinction at Yale were James Hadley (1821–1872), who is known by his Greek grammar; ¹ L. R. Packard (1836–1884), and Thomas Day Seymour (1848–1907), whose studies were largely upon Homer, though he produced one edition of selected odes from Pindar (1882). His last work was Life in the Homeric Age, his swan-song, the results of long years of patient study.

Of American scholarship it is difficult to write, for the fine flavour of it and its opportunities are all new, and its ablest representatives are still living men. Let it be long before it becomes possible to mention them in a volume that has to do so fully and almost wholly with those who have laid aside their pleasant labours.

¹ 1860; last ed. rev. by F. D. Allen (1884).

$\mathbf{x}\mathbf{I}$

THE COSMOPOLITAN PERIOD

WITH the death of Theodor Mommsen, the twentieth century appears to have entered upon a new and remarkable period of scholarship. It has passed through the rough and rugged paths by which all learning is attained, the value of classical training is now recognised on every side, and all possible means are provided for its efficient and illuminating study. Immense sums are given for its betterment, and many countries maintain special schools for classical study in Rome and Athens.

Furthermore, the scholars of to-day are divided into groups according to their own inclination and their especial ability. A still more marked distinction from the past is that universities are not now separated and isolated as they were even in the period of Nationalism. The students and professors of one country pass to the fellowship of the professors and students of another country, very much as they did in the time of the Renaissance, but with much more facility and a still greater assurance of welcome. This is noticeable in the United States, where chairs are established for the interchange of American Professors

with those of foreign lands, which lecturers are welcomed every year from Germany, France, England, Italy, and the Scandinavian countries. The whole world of learning has become a single world without becoming a narrow world.

Every division of Classical Philology is now regarded as intimately united with all the rest. Archæology throws light on usage and on custom, Art refines and gives beauty to Numismatics, and makes the readings of the Classics an æsthetic pleasure. Language study is no longer crude nor a matter of mere guesswork; but since the remarkable discovery of Verner and the splendid expository work of Brugmann, it is a science of the highest order. Moreover, the love of the Classics for themselves has grown and flourished.

But perhaps the greatest gift which has come to us in modern times, from the teaching of Scientific Philology, is the recognition of the value of scientific truth. When we look back upon the controversies and foul wrangling of men of genius like Scioppius and Scaliger and Milton, we see that they in reality were fighting first for victory and only partially for truth. To-day, one hopes that in whatever form the higher study may reveal itself, it will reveal itself as a longing for idealised worship of reality and verity in all things.

So long ago as 1870, the great Romance scholar, Gaston Paris, uttered in a lecture this splendid *credo:*—

"I profess absolutely and without reserve this doctrine that science has no other aim than truth, and truth for its own sake, without care for the consequences, good or ill, regrettable or happy, which that truth might have in practice. He who from a patriotic, religious, or even from a moral motive, allows himself in the facts that he is studying, in the conclusions that he draws, the smallest dissimulation, the slightest alteration, is not worthy of a place in the great laboratory to which truthfulness is a more indispensable claim to admission than skill. Thus understood, studies in common carried on in the same spirit in all civilised countries, form, above restricted, diverse, and often hostile nationalities, a great fatherland which no war soils, which no conqueror threatens, but wherein souls find the refuge and the unity which was given them of old by the citadel of God."

INDICES

- I. SELECTED BIBLIOGRAPHICAL INDEX
- II. GENERAL INDEX

SELECTED BIBLIOGRAPHICAL INDEX

Abbott, E. Pericles (London, 1891).

Abbott, F. F. The Use of Repetition in Latin (Chicago, 1902).

Adam, James. The Religious Teachers of Greece (Edinburgh, 1908).

Allbut, Thomas C. Science and Mediæval Thought (London, 1901).

Allman, G. J. Greek Geometry from Thales to Euclid (Dublin, 1880).

Antichan, P. H. Les Grands Voyages de Découvertes des Anciens (Paris, 1891).

Arbenz, Emil. Die Schriftstellerei in Rom zur Zeit der Kaiser (Basle, 1877). Archer, T. A., and Kingsford, C. L. The Crusades (New York, 1898). Assailly, Octave d'. Albert le Grand (Paris, 1870).

В

Ball, R. S. Great Astronomers (New York, 1899).

Ball, W. W. R. A Short Account of the History of Mathematics (London, 1901).

Bascom, John. The Philosophy of Rhetoric (New York, 1888).

Bayet, Charles. L'Art Byzantin (Paris, 1892).

Bémont, Charles, and Monod, G. Mediæval Europe, English translation (New York, 1906).

Benn, Alfred W. Early Greek Philosophy (London, 1908).

Greek Philosophers (London, 1883).

Bentley, Richard. Critica Sacra, new ed. by A. A. Ellis (Cambridge, 1862).

Dissertation on the Epistles of Phalaris, last ed. by W. Wagner (Berlin, 1874).

Bernays, Jakob. Life of Joseph Scaliger (Berlin, 1855).

Bernhardy, Gottfried, Eratosthenica (Berlin, 1822).

Geschichte der Griechischen Litteratur, 5th ed. (Halle, 1877-1892).

Grundriss der Römischen Litteratur. 2 vols., 5th ed. (Brunswick, 1865).

Bernstein, G. H. Versus Ludicri in Casares Priores (Halle, 1810).

Berry, Arthur. A Short History of Astronomy (New York, 1899).

Besant, Walter. Edward Henry Palmer (London, 1883).

Binde, Robert. Seneca (Glogau, 1883).

Birt, Theodor. Das Antike Buchwesen (Berlin, 1882).

Historia Hexametri Latini (Bonn, 1876).

Blass, F. W. Die Attische Beredsamkeit, 2d ed., 3 vols. (Leipzig, 1898).

The Pronunciation of Ancient Greek, Eng. trans. (Cambridge 1800).

Die Interpolationen in der Odyssee (Halle, 1904).

Blau, August. De Aristarchi Discipulis (Jena, 1883).

Boeckler, Doctor. Die Polychromie in der Antiken Sculptur (Aschersleben, 1882).

Boissier, Gaston. Études sur la Vie et les Œuvres de M. T. Varron (Paris, 1861).

La Fin du Paganisme (Paris, 1891).

La Religion Romaine d'Auguste aux Antonins (Paris, 1906).

Le Poète Attius (Paris, 1857).

Roman Africa, Eng. trans. (New York, 1899).

Bonnet, A. M. Le Latin de Grégoire de Tours (Paris, 1890).

Booth, John. Epigrams Ancient and Modern, 3d ed. (London, 1874).

Botsford, G. W. A History of the Orient and Greece (London and New York, 1904).

Bötticher, K. E. F. De Alliterationis apud Romanos Vi et Usu (Berlin, 1884).

Bréal, M. J. A. Pour Mieux Connaître Homère (Paris, 1906).

Broglie, Emmanuel de. La Société de l'Abbaye de Saint-Germain des Prés, 2 vols. (Paris, 1891).

Browne, Henry. Handbook of Homeric Study (London and New York, 1905).

Brugmann, Karl. Zum heutigen Stand der Sprachwissenschaft (Leipzig, 1885).

Brunet, Gustave. Manuel du Libraire, etc., 8 vols. (Paris, 1880).

Budé, E. de. Vie de Budé (Paris, 1884).

Bühler, J. G., and Kielhorn. Grundriss der Indo-arischen Philologie (Strassburg, 1896 fol.).

Bunbury, E. H. A History of Ancient Geography, 2d ed. (London, 1883). Burckhardt, Jakob. Geschichte der Renaissance in Italien (Stuttgart, 1890-1801).

Kultur der Renaissance in Italien, 8th ed. (Leipzig, 1904).

The Civilization of the Renaissance in Italy, Eng. trans. (London, 1898).

Bursian, Konrad. Geschichte der Klassischen Philologie in Deutschland, etc. (Munich, 1883).

Bury, J. B. A History of the Later Roman Empire (London, 1887).

Ed. Gibbon's History of the Decline and Fall of the Roman Empire (London, 1896).

Life of St. Patrick (Cambridge, 1905).

Butcher, S. H. Aristotle's Theory of Poetry and Fine Art (London, 1902).

Demosthenes, last ed. (London, 1903).

Cajori, Florian. A History of Elementary Mathematics (London and New York, 1907).

A History of Mathematics (New York, 1906).

Capes, W. W. University Life in Ancient Athens (London, 1877).

Cara, P. C. A. Gli Hethei Pelasgi (Rome, 1894-1902).

Carroll, Mitchell. Aristotle's Poetics (Baltimore, 1895).

Castellani, Carlo. Delle Biblioteche nell' Antichità (Bologna, 1884).

Cave, William. Primitive Christianity (London, 1834).

Chaignet, A. E. Pythagore et la Philosophie Pythagorienne (Paris, 1873).

Chalandon, Georges. Essai sur Ronsard (Paris, 1875).

Charles, Emile. Roger Bacon; sa Vie, ses Ouvrages, ses Doctrines d'après des Textes Inédits (Paris, 1861).

Chassang, Alexis. Histoire du Roman, &c. (Paris, 1862).

Church, R. W. Miscellaneous Essays (London, 1888).

The Beginning of the Middle Ages (London, 1805).

Cirbied, J. C. de. Mémoires et Dissertations (Paris, 1824).

Clark, J. W. Libraries in the Mediæval and Renaissance Period (Cambridge, 1894).

Clark, Victor S. Studies in the Latin of the Middle Ages (Lancaster, Penn., 1900).

Clarke, George. The Education of Children at Rome (New York, 1896).

Classen, Johannes. Introduction to the edition of Thucydides (Berlin, 1897).

Clément, Louis. De Hadriani Turnebi . . . Praefationibus et Poematis (Paris, 1800).

Clinton, H. F. Fasti Hellenici, 3 vols. (Oxford, 1824-1834).

Clodd, Edward. The Story of the Alphabet (New York, 1903).

Cochin, Henri. Boccace, Études Italiennes (Paris, 1890).

Collignon, Albert. Étude sur Pétrone (Paris, 1892).

Comparetti, Domenico. Vergil in the Middle Ages, Eng. trans. (London and New York, 1895).

Compayré, Gabriel. Abélard and the Origin and Early History of Universities (New York, 1893).

History of Paedagogy, Eng. trans. (Boston, 1886).

Condamin, J. P. De Tertulliano Christianæ Linguæ Artifice (Lyons, 1877).

Conway, R. S. Verner's Law in Italy (London, 1803).

Cook, Albert S. The Age of Poetry (Boston, 1892).

Cooper, F. T. Word Formation in the Roman Sermo Plebeius (New York, 1895).

Cotton, Henry. Typographical Gazeteer, 3d ed. (Oxford, 1852-1866).

Couat, Auguste. La Poésie Alexandrine (Paris, 1882).

Courthope, W. J. Life in Poetry: Law in Taste (London, 1901).

Cox, G. W. The Greeks and the Persians (New York, 1897).

Cramer, Friedrich. De Græcis Medii Aevi Studiis (Lund, 1849-1853).

Creuzer, Georg F. Opuscula (Leipzig, 1817).

Croiset, Alfred. Xénophon, son Caractère et son Talent (Paris, 1873).

Croiset, A. and M. An Abridged History of Greek Literature, Eng. trans. (New York, 1904).

Cros, C. I. H., and Henri, Charles. L'Encaustique (Paris, 1884).

Curteis, A. M. A History of the Roman Empire from 375 to 800 A.D. (London, 1875).

Curtius, Ernst. History of Greece, Eng. trans., 5 vols. (New York, 1868-1872).

D

Decharme, Paul. Euripides and the Spirit of His Dramas, Eng. trans. (New York, 1906).

Dedouvres, E. Les Latins (Paris, 1903).

Dejob, Charles. Marc Antoine Muret (Paris, 1881).

Delbrück, Berthold. Einleitung in das Sprachstudium, 3d ed. (Leipzig, 1893); Eng. trans. (London, 1882).

Delepierre, J. O. La Parodie chez les Grecs, etc. (London, 1870).

Denis, Jacques. La Comédie Grecque, 2 vols. (Paris, 1886).

Deschamps, Pierre. Dictionnaire de Géographie à l'Usage du Libraire (Paris, 1870).

De Vinne, T. L. The Invention of Printing (New York, 1878).

Notable Printers of Italy during the Fifteenth Century (New York, 1910).

De Vit, Vincenzo. Preface to the Lexicon of Forcellini (Prato, 1879).

Didot, A. F. Alde Manuce et l'Helléwisme à Venise (Paris, 1875).

Bibliotheca (Paris, 1872).

Draper, J. W. History of the Intellectual Development of Europe (New York, 1899).

Dressel, Heinrich, De Isidori Originum Fontibus (Turin, 1874).

Drisler, Henry. Classical Studies in Honour of (New York, 1894).

DuBois, E. H. Stress Accent in Latin Poetry (New York, 1906).

Du Cange [Charles du Fresne], Glossarium ad Scriptores Mediæ et Infimæ Latinitatis, ed. by Favre (Niort, 1884-1887).

Duff, J. W. A Literary History of Rome (London and Leipzig, 1909).

Duffield, S. A. W. Latin Hymn-Writers and their Hymns (New York, 1889).

Dugdale, William. Monasticum Anglicanum, 8 vols. (London, 1817-1830).

Du Méril, Édelstand, Poésies Populaires Latines Antérieures au Douzième Siècle (Paris, 1843).

Poésies Latines du Moyen Age (Paris, 1847).

Dunlop, J. C. A History of Prose Fiction, last ed. (London, 1896).

Dyce, Alexander. The Complete Works of Richard Bentley, 3 vols. (London, 1836).

The Table-Talk of Samuel Rogers, to which is added Porsoniana (London, 1856).

 \mathbf{E}

Eckstein, F. A. Lateinischer und Griechischer Unterricht (Leipzig, 1887). Egger, Émile. Callimaque et l'Origine de la Bibliographie (Paris, s. a.).

Essai sur l'Histoire de la Critique chez les Grecs (Paris, 1886).

L'Hellénisme en France, 2 vols. (Paris, 1869).

Einstein, Lewis. The Italian Renaissance in England (London, 1907).

Emerton, Ephraim. Erasmus (New York, 1899).

Engel, Carl. The Music of the Most Ancient Nations (London, 1864).

Engel, Karl D. L. Zusammenstellung der Faust Schriften (Altenburg, 1885).

Erasmus, Desiderius. De Recta Latini Græcique Sermonis Pronunciatione (Basel, 1528).

Epistolæ (1484-1514), ed. by P. S. Allen (Oxford, 1906). Opera Omnia (Basel, 1540).

Essenwein, A. O. Byzantinische Baukunst (Darmstadt, 1896).

Eyssenhardt, Franz. Niebuhr (Gotha, 1886).

F

Faulman, Karl. Geschichte der Buchtructverkunst (Vienna, 1882). Federn, Karl. Dante and His Time, Eng. trans. (New York, 1902). Feugère, L. J. Essai sur la Vie et les Ouvrages de Henri Étienne (Paris, 1853).

Field, W. The Life of Samuel Parr, 2 vols. (London, 1828).

Fink, Karl. A History of Mathematics (Chicago, 1900).

Fitz-Hugh, Thomas. Outlines of a System of Classical Paedagogy (Baltimore, 1900).

Flach, H. L. M. Peisistratos und Seine Litterarische Thätigkeit (Tübingen, 1885).

Fleischer, L. O. Die Reste der Altgriechischen Tonkunst (Leipzig, 1900). Forbes, W. H. Life and Mind of Thucydides (London, 1895).

Fowler, H. A., and Wheeler, J. R. A Handbook of Greek Archaelogy (New York, 1909).

Frazer, R. W. A Literary History of India (New York, 1901).

Frick, Carolus. Pomponius Mela und Seine Chorographie (Leipzig, 1880).

Froude, J. A. Erasmus (London, 1894).

G

Gardner, Percy. New Chapters in Greek History (London and New York, 1892).

Gardthausen, V. E. Griechische Paläographie (Leipzig, 1879).

Gasquet, F. A. The Eve of the Reformation (London, 1898; New York, 1900).

Geiger, Ludwig. Petrarca (Leipzig, 1874).

Geraud, P. H. J. F. Les Livres dans l'Antiquité (Paris, 1840).

Gerlach, F. D. Geschichtschreiber der Römer (Stuttgart, 1855).

Gevaert, F. A. Histoire et Théorie de la Musique dans l'Antiquité (Ghent, 1875-1881).

Gibbon, Edward. The Decline and Fall of the Roman Empire, ed. by Bury (Cambridge, 1899).

Giles, P. A Short Manual of Comparative Philology (London, 1895).

Girard, Jules. La Peinture Antique (Paris, 1895).

Études sur l'Éloquence (Paris, 1874). Gleditsch, J. G. Die Pythagoreer (Posen, 1841).

Gräfenhan, E. F. A. Geschichte der Klassischen Philologie in Alterthum, 7 vols. (Bonn, 1843-1850).

Grandgent, Charles H. Vulgar Latin (Boston, 1908).

Graves, F. P. A History of Education before the Middle Ages (New York, 1900).

Greenwood, J. G. Pneumatics (London, 1851).

Gregorovius, F. History of the City of Rome in the Middle Ages, Eng. trans. (London, 1894).

Gresswell, W. P. Memoirs of Angelus Politianus, etc. (London, 1805). Gros, Étienne. Étude sur la Rhétorique chez les Grecques (Paris, 1835).

Gubernatis, Angelo de. Storia della Poesia Epica (Milan, 1883).

Gudeman, Alfred. Outlines of the History of Classical Philology (Boston, 1902).

Η

Haase, F. De Latinorum Codicum Manuscriptorum Subscriptionibus (Breslau, 1860).

Hadley, James. Essays (New York, 1873).

Haight, A. E. The Tragic Drama of the Greeks (Oxford, 1896).

Hall, H. R. The Oldest Civilization of Greece (London, 1901).

Hankel, Hermann, Geschichte der Mathematik in Alterthum und Mittelalter (Leipzig, 1874).

Hankius, Martinus (Martin Hanke). De Byzantinarum Rerum Scriptoribus Graecis (Leipzig, 1677).

Hardie W. R. Lectures on Classical Subjects (London, 1903).

Hardouin, Henri. Essai sur la Vie et les Ouvrages de du Cange (Paris, 1849).

Harnack, Adolf. Das Mönchthum (Giesen, 1895).

Harrison, Frederic. Byzantine History in the Early Middle Ages (London, 1900).

Hart, G. De Tzetzarum Nomine, Vita, Scriptis (Leipzig, 1880).

Hartfelder, Karl. Philipp Melanchihon als Praeceptor Germaniae (Berlin, 1889).

Hartmann, Paul. De Canone Decem Oratorum (Göttingen, 1891).

Havet, P. A. L. De Saturnio Latinorum Versu (Paris, 1880).

Henderson, W. J. How Music Developed (New York, 1898).

Hergenröther, J. A. G. Photios, 3 vols. (Regensburg, 1867-1869).

Heyse, C. W. L. System der Sprachwissenschaft (Berlin, 1856).

Hildebrand, August. Boetius und Seine Stellung zum Christenthum (Regensburg, 1885).

Hill, G. B. Ed. Gibbon's Memoirs (London, 1900).

Hodgkin, Thomas. Italy and Her Invaders, 8 vols. (Oxford, 1892–1899).

The Letters of Cassiodorus (London, 1886).

Hoe, Robert. A Short History of the Printing Press (New York, 1902).

Holm, Adolph, History of Greece from Its Commencement to the Close of the Independence of the Greek Nation (London, 1894–1899).

Howells, W. D. My Literary Passions (New York, 1895).

Hübner, F. Enyclopädie, 2d ed. (Berlin, 1892).

Hyde, Douglas. A Literary History of Ireland (Dublin and New York, 1899).

I

Ihne, W. Early Rome (New York, 1902).

T

Jannet, Claudio. Les Institutions Sociales . . . à Sparte, 2d ed. (Paris, 1880).

Janssen, Johannes. A History of the German People, Eng trans. (London, 1881).

Jebb, Richard C. Attic Orators, 2d ed., 2 vols. (London, 1893).

Bentley — English Men of Letters Series, 2d ed. (New York, 1899). Erasmus (Cambridge, 1890).

Homer (Boston, 1887).

The Growth and Influence of Classical Greek Poetry (London, 1893).

Jevons, F. B. A History of Greek Literature (New York, 1897).

Joly, Aristide. Étude sur Sadolet (Caen, 1857).

Jones, Stuart. Select Passages from Ancient Writers Illustrative of the History of Greek Sculpture (London, 1895).

Jortin, John. Remarks on Ecclesiastical History (London, 1751-1773).

Jowett, B. W. Dialogues of Plato, 2d ed. (Oxford, 1893).

Justi, Karl. Winckelmann, Sein Leben, Seine Werke, und Seine Zeitgenossen, 3 vols. (Leipzig, 1872).

K

Keil, H. Grammatici Latini (Leipzig, 1855-1880).

Keller, Otto, Epilegomena zu Horaz (Leipzig, 1879).

Ker, W. P. The Dark Ages (New York, 1904).

Kiessling and Lehrs. Chiliades (Leipzig, 1826 and 1840).

Kingsley, Charles. Alexandria and Her Schools (Cambridge, 1854). Klotz, Richard. Grundzüge der Altrömischen Metrik (Leipzig, 1800).

Körting, G. K. O. Boccaccios Leben und Werke (Leipzig, 1880).

Kortüm, J. F. C. Geschichtliche Forschungen (Leipzig, 1863).

Kraemer, August. De Manilii Qui Fertur Astronomicis (Marburg, 1890).

Kroll, Wilhelm. Geschichte der Klassischen Philologie (Leipzig, 1908). Kugler, Bernard von. Geschichte der Kreuzzitge (Berlin, 1891).

L

Laffore, Jules de B. de. Étude sur Jules César de Lescale (Agen, 1860).
Lanciani, R. A. Ancient Rome in the Light of Recent Excavations (Boston, 1880).

Lang, Andrew. Oxford (Philadelphia, 1906).

Larroque, Philippe T. de. Lettres Françaises Inédites de Joseph Scaliger (Agen, 1881).

Laur, H. Durand de. Life of Erasmus (Paris, 1872).

Lawton, W. C. The Successors of Homer (London, 1898).

Leake, W. M. The Topography of Athens (London, 1821).

Lecky, W. E. H. History of European Morals (New York, 1884).

Lee, Vernon. Euphorion (London, 1884).

Lefranc, A. J. M. Histoire du Collège de France (Paris, 1893).

Lehrs, Karl. De Aristarchi Studiis Homericis (Königsberg, 1833; 3d ed. 1882).

Appendix to Herodiani Scripta Tria (Berlin, 1857).

Leland, C. G. The Unpublished Legends of Vergil (New York, 1900).

Le Mire, Aubert. Life of Lipsius (Antwerp, 1609).

Leo, Friedrich. De Vidularia Plauti (Göttingen, 1895).

Lersch, Laurenz. Sprachphilosophie der Alten, 3 vols. (Bonn, 1838-1841).

Lichtenberger, Henri. Le Poème et la Légende des Nibelungen (Paris, 1891).

Lindsay, W. M. The Latin Language (Oxford, 1804).

Lloyd, W. W. The Age of Pericles, 2 vols. (London, 1875).

Lobeck, C. A. De Antiphrasi et Euphemismo (s. l. et a).

Lorenz, Ottocar. The Life of Alcuin, Eng. trans. (London, 1837).

Löwe, Gustav. Prodromus Glossariorum Latinorum (Leipzig, 1876).

Luard, H. R. Cambridge Essays (London, 1857).

The Correspondence of Richard Porson (Cambridge, 1866).

Ludwich, Arthur. Aristarchs Homerische Textkritik (Leipzig, 1884-1885).

Die Homer-Vulgata als Voralexandrinische Erwiesen (Leipzig, 1898).

M

McCabe, Joseph. Peter Abélard (New York, 1901).

Macaulay, T. B. Essays (London, 1861 and foll.).

Macdonell, Arthur A. A History of Sanskrit Literature, with bibliographical notes (New York, 1900).

Mackail, J. W. Latin Literature (New York, 1907).

Select Epigrams (London, 1891).

Mahaffy, J. P. History of Classical Greek Literature, 2 vols. (New York, 1880).

Old Greek Education (London and New York, 1882).

What Have the Greeks Done for Modern Civilization? (London and New York, 1909).

Mähly, Jacob A. Richard Bentley, Eine Biographie (Leipzig, 1868).

Mahn, E. A. P. Darstellung der Lexicographie nach Allen Ihren Seiten (Rudolstadt, 1817).

Maitland, S. R. The Dark Ages (London, 1853).

Maittaire, Michael. Historia Typographorum Aliquot Parisiensium (London, 1717).

Mariette, P. J. Pierres Gravées (Paris, 1752).

Marrast, Augustin. Esquisses Byzantines (Paris, 1874).

Marschall, Carl. De Quinti Remmii Palaemonis Libris Grammaticis (Leipzig, 1887).

Marsden, William, Ed. The Memoirs of W. M. Leake (London, 1864). Martha, Constant. Le Poème de Lucrèce (Paris, s. a.).

Martin, J. P. La Vulgate Latine au xii s. d'après Roger Bacon (Paris, 1888).

Matthai, C. F. von. Glossaria Græca (Moscow, 1774-1775).

Mengin, Urban. Documents sur J. C. Scaliger et sa Famille (Paris, 1880).

Meyer, Eduard. Forschungen sur Alten Geschichte, 4 vols. (Halle, 1892).

Mézières, A. J. F. Pétrarque (Paris, 1868).

Michaud, J. F. The History of the Crusades. Eng. trans. (London, 1881).

Michaud Frères. Biographie Universelle Ancienne et Moderne, last ed., 45 vols. (Paris, 1843-1865).

Michaut, Gustave. Le Génie Latin (Paris, 1904).

Middleton, J. H. The Engraved Gems of Classical Times (London, 1892).

Migne, J. P. Patrologiæ Cursus Completus — Gr. and Lat. (Paris, 1857-1866).

Möhler, J. A. Geschichte des Mönchthums (Regensburg, 1866-1868).

Mommsen, Theodor. A History of Rome, Eng. trans. (New York, 1903-1905).

Monk, J. H. The Life of Richard Bentley, 2d ed. (London, 1833).

Monro, D. B. Modes of Ancient Greek Music (Oxford, 1894).

Monroe, Paul. Source Book of the History of Education, Greek and Roman Period (New York, 1901).

Montalambert, C. F. de T. The Monks of the West, Eng. trans. (London, 1861).

Montfaucon, Bernard de. L'Antiquité Expliquée et Representée en Figures, 10 vols. (Paris, 1719).

Morison, J. C. Gibbon — English Men of Letters Series (New York, 1879).

Müller, F. Max. India, What Can It Teach Us? last ed. (London, 1892).

Lectures on the Science of Language, last ed. (London, 1891).

The Sacred Books of the East, 2d ed. (London, 1892).

Müller, Iwan. Handbuch der Klassischen Alterthumswissenschaft, 3d ed., 5 vols. (Munich, 1901).

Müller, Lucian. Friedrich Ritschls Leben (Berlin, 1877).

Geschichte der Klassischen Philologie in den Niederlanden (Leipzig, 1860).

Greek and Latin Versification, Eng. trans. (Boston, 1895).

Müller, P. E. De Genio Aevi Theodosiani (Copenhagen, 1797).

Mullinger, J. B. The Schools of Charles the Great (London, 1877).

Murray, Gilbert. A Handbook of Greek Archaelogy (London, 1892).

Müntz, Eugène. Les Précurseurs de la Renaissance (Florence, 1902).

N

Nettleship, Henry. Essays in Latin Literature (Oxford, 1889). Lectures and Essays (Oxford, 1895).

Newell, E. J. St. Patrick, His Life and Teachings (London, 1890).

Nichols, F. M. Epistles of Erasmus (New York, 1901-1904).

Nicoll, H. J. Great Scholars (Edinburgh, 1880).

Nisard, Charles. Essai sur les Poètes Latins de la Décadence (Paris, 1867). Les Gladiateurs de la République des Lettres (Paris, 1889).

Le Triumvirat Littéraire (Paris, s. a.).

Nolhac, Pierre de. Érasme en Italie (Paris, 1888).

Pétrarque et l'Humanisme (Paris, 1892, 2d ed. 1907).

Norden, Eduard. Die Antike Kunstprosa (Leipzig, 1898).

Nordenskjöld, A. E. Periplus (Stockholm, 1897).

0

Olcott, G. N. Studies in the Word Formation of the Latin Inscriptions (Rome, 1898).

Olleris, Alex. Cassiodore, Conservateur des Livres de l'Antiquité Latine (Paris, 1884).

Oman, C. W. C. The Story of the Byzantine Empire (London and New York, 1802).

Orelli, J. K. Onomasticon Ciceronis, last ed. (Zürich, 1887-1888).

Otto, Friedrich. Sprichwörter der Römer (Leipzig, 1890).

Overbeck, J. A. Geschichte der Griechischen Plastik (Leipzig, 1894).

P

Pais, Ettore. Ancient Legends of Roman History, Eng. trans. (New York, 1905).

Parthey, G. F. C. Das Alexandrinische Museum (Berlin, 1838).

Pater, Walter. Studies in the History of the Renaissance (London, 1888).

Pattison, Mark. Essays, 2 vols. (Oxford, 1889).

Isaac Casaubon, ed. by Nettleship, 2d ed. (Oxford, 1892).

Paul, F. De Sillis (Berlin, 1821).

Paul, H. Grundriss, 3 vols., last ed. (Strassburg, 1896, foll.).

Paulsen, Friedrich. The German Universities, Eng. trans. (New York, 1895).

Pearson, Alfred. A Short History of the Renaissance (Boston, 1893).

Pearson, Karl. Ethic of Free Thought (London, 1901).

Peck, H. T. Cena Trimalchionis, 2d ed. (New York, 1908).

Literature (New York, 1908).

Pennington, A. R. Life of Erasmus (London, 1901).

Perrier, J. L. The Revival of Scholastic Philosophy (New York, 1909).

Perrot, Georges. Les Précurseurs de Démosthène (Paris, 1873).

Perthes, Justus. Atlas Antiquus (Gotha, 1893).

Peter, Hermannus. Historicorum Romanorum Fragmenta (Leipzig, 1883).

Picavet, F. J. Esquisse d'une Histoire Générale et Comparée des Civilisations Mediévales (Paris, 1905).

Pieri, Marius. Pétrarque et Ronsard (Marseille, 1895).

Plessis, F. Métrique Grecque et Latine (Paris, 1889).

Pökel, W. Schriftstellerlexikon (Leipzig, 1882).

Polle, K. F. De Artis Vocabulis Quibusdam Lucretianis (Dresden, 1866).

Prothero, G. W. ed. The Letters of Gibbon (London, 1896).

Prutz, Hans. Kulturgeschichte der Kreuzzüge (Berlin, 1898).

The Age of the Renaissance (New York, 1902).

Putnam, G. H. Books and Their Makers in the Middle Ages (New York, 1896-1897).

R

Rabe, Hugo. De Theophrasti Libris (Bonn, 1890).

Rashdall, Hastings. The Universities of Europe during the Middle Ages (Oxford, 1895).

Reiffenberg, F. A. F. T. De Justi Lipsi Vita et Scriptis Commentarius (Brussels, 1823).

Reiley, Katherine, Philosophical Terminology of Lucretius and Cicero (New York, 1909).

Reinach, Salomon. Manuel de Philologie Classique, 2d ed., 2 vols. (Paris, 1885).

Renan, Ernest. Mélange d'Histoire et de Voyage dans l'Antiquité (Paris, 1898).

Ribbeck, Otto. Geschichte der Römischen Dichtung, 2 vols., 2d ed. (Leipzig, 1897–1900).

Ridgeway, William. The Early Age of Greece (Cambridge, 1901, foll.).

Ritschl, F. W. Die Alexandrinischen Bibliotheken (Breslau, 1838).

Neue Plautinische Excurse (Leipzig, 1869).

Opuscula Philologica (Leipzig, 1866).

Roberts, E. S. Greek Epigraphy (Cambridge, 1887-1905).

Roberts, William. History of Letter Writing (London, 1843).

Robinson, J. H., and Rolfe, J. C. Petrarch (New York, 1898).

Röhricht, Reinhold. Geschichte des Königreichs Jerusalem (Berlin, 1898).

Roth, K. L. Leben Varros (Basle, 1857).

Rüdinger, Wilhelm. Petrus Victorinus (Halle, 1896).

Ruske, Lothar. De Auli Gellii Noctium Atticarum Fontibus (Breslau, 1883).

S

Saalfeld, G. A. E. A. Der Hellenismus in Latium (Wolfenbüttel, 1883).

St. Hilaire, Barthélemy de. De l'École d'Alexandrie (Paris, 1845).

Saintsbury, George. A History of Criticism, 3 vols. (New York, 1900; London, 1901–1902).

Salverte, François de. Le Roman dans la Grèce Ancienne (Paris, 1894). Sandys, J. E. A History of Classical Scholarship, 3 vols., 2d ed. (Cam-

bridge, 1908).

Lectures on the Revival of Learning (Cambridge, 1905).

Scartazzini, G. A. A Handbook to Dante, Eng. trans. (Boston, 1897).

Schanz, Martin von. Die Sophisten (Göttingen, 1867).

Scherer, W. Poëtik (Berlin, 1888).

Schmidt, Joseph. De Latinitate Tertulliani (Erlangen, 1870).

Schmidt, K. E. Beiträge zur Geschichte der Grammatik (Halle, 1859).

Schneidewin, F. W. The Preface to Pindar (Göttingen, 1837).

Schömann, G. F. Geschichte der Alterthümer, 4th ed. (Berlin 1897).

Schroeder, Leopold von. Indiens Litteratur und Cultur (Leipzig, 1887).

Schück, Julius. Aldus Manutius und Seine Zeitgenossen (Berlin, 1862).

Scott, Leader. The Renaissance of Art in Italy (London, 1888).

Sears, Lorenzo. History of Oratory (Chicago, 1903).

Sellar, W. Y. The Roman Poets of the Augustan Age (Oxford, 1892).

Sergi, Giuseppe. The Mediterranean Race, Eng. trans. (London, 1901).

Seymour, T. D. Life in the Homeric Age (New York, 1908).

Shepherd, William. Life of Poggio (Liverpool, 1837).

Simon, Jules. Histoire de l'École d'Alexandrie, 2 vols. (Paris, 1844-1845).

Skrzeczta, R. F. L. Die Lehre des Apollonius Dyscolus (Königsberg, 1858-1869).

Smyth, H. W. Melic Poets (New York, 1900).

Sokolowski and Szujski. Monumenta Medii Æevi (Cracow, 1876).

Spangenberg, E. P. J. Jacob Cujas und Seine Zeitgenossen (Leipzig, 1822).

Spanheim, Ezechiel. Dissertatio de Usu et Præstantia Numismatum Antiquorum (Amsterdam, 1671).

Spiegel, F. von. Die Alexander Saga (Leipzig, 1851).

Spingarn, J. E. Critical Essays of the Seventeenth Century, 3 vols. (Oxford, 1908-1909).

Literary Criticism in the Renaissance (New York, 1908).

Steffen, Georg. De Canone qui Dicitur Aristophanis et Aristarchi (Leipzig, 1876).

Steinthal, Eduard. Geschichte der Sprachwissenschaft bei den Griechen und Römern, 2 vols., 2d ed. (Berlin, 1891).

Steup, Jul. De Probis Grammaticis (Jena, 1871).

Stuart, James, and Rowe, Nicholas. The Antiquities of Athens Measured and Delineated, 1st ed. (London, 1762); 2d ed. (London, 1825-1830).

Sturz, F. W. Opuscula Nonnulla (Leipzig, 1825).

Suringar, W. H. D. De Romanorum Autobiographis (Leyden, 1846). Historia Critica Scholiastarum Latinorum (Leyden, 1834-1835).

Susemihl, Franz. Geschichte der Griechischen Litteratur in der Alexandriner Zeit (Leipizig, 1891-1892).

Sutphen, M. C. Latin Proverbs (Baltimore, 1902).

Sybel, H. K. L. von. Geschichte der Ersten Kreuzzüge (Leipzig, 1900).

Symonds, J. A. History of the Italian Renaissance, 7 vols. (London, 1875).

T

Tannery, Paul. La Géométrie Grecque (Paris, 1887).

Taylor, H. C. The Mediæval Mind (New York, 1911).

Teignmouth, J. S. The Life of Sir William Jones (London, 1808).

Teuffel-Schwabe-Warr. A History of Roman Literature, 2 vols. (London, 1892).

Texier, C. F. M., and Pullan, R. P. Byzantine Architecture (London, 1894).

Thackeray, F. St. J. Anthologia Graca, with English notes (London, 1877).

Thiaucourt, Camille. Les Traités Philosophiques de Cicéron et Leurs Sources Grecques (Paris, 1885).

Thurneysen, Rudolf. Der Saturnier (Halle, 1885).

U

Ueberweg, F. Grundriss der Geschichte der Philosophie, 9th ed. (Leipzig, 1907).

Usener, Hermann. Dionysii Halic. Librorum de Imitatione Reliquiæ (Leipzig, 1899).

Epicurea (Leipzig, 1887).

Ulrici, Hermann. Geschichte der Griechischen Dichtkunst (Berlin, 1835).

v

Vacherot, Étienne. Histoire Critique de l'École d'Alexandrie, 3 vols. (Paris, 1846-1851).

Vahlen, Johannes. Lorenzo Valla (Vienna, 1870).

Vanel, J. B. Les Bénédictins de Saint-Maur (Paris, 1896).

Verrall, A. W. Euripides the Rationalist (Cambridge, 1895).

Vibaek, M. Life of Karl Verner (Copenhagen, 1803).

Voight, Georg. Die Wiederbelebung des Klassischen Alterthums oder das Erste Jahrhundert des Humanismus, 3d ed. (Berlin, 1893).

Volkmann, R. E. Geschichte im Kritik der Wolfs Prolegomena (Leipzig, 1874).

Voss, Otto. De Heraclidis Pontici Vita et Scriptis (Rostock, 1897).

Vries, Jeronimo de. Hugo Grotius (Amsterdam, 1827).

W

Wachsmuth, Curt. De Cratete Mallota (Leipzig, 1860).

Walden, J. W. H. The Universities of Ancient Greece (New York, 1909).

Warren, F. M. A History of the Novel (New York, 1895).

Wattenbach, Wilhelm. Das Schriftwesen im Mittelalter (Leipzig, 1875). Wegener, C. F. W. De Aula Attalica (Copenhagen, 1836).

Weise, F. O. Characteristik der Lateinischen Sprache, 3d ed. (Leipzig, 1905), Eng. trans. (London, 1909).

Weissenfels, Oskar. Aesthet-Kritische Analyse der Ars Poetica (Görlitz, 1880).

Horaz (Berlin, 1899).

Welcker, F. G. Der Epische Cyclus, 2d ed. (Bonn, 1865-1882).

Werner, R. M. Lyrik und Lyriker (Leipzig, 1890).

West, A. F. Alcuin and the Rise of Christian Schools (New York, 1892).

Roman Autobiography (New York, 1901).

Westphal, Rudolf. Allgemeine Metrik (Berlin, 1892).

Die Musik des Griechischen Alterthums (Leipzig, 1887).

Whitney, W. D. Language and the Study of Languages, 4th ed. (New York, 1884).

The Life and Growth of Language, last ed. (New York, 1890).

Whittaker, Thomas, The Neo-Platonists (Cambridge, 1901).

Wiese, L. A. De Vitis Scriptorum Romanorum (Berlin, 1840).

Wilamowitz-Möllendorf, Ulrich von. Euripidis Herakles (Berlin, 1889).

Wilken, Friedrich. Geschichte der Kreuzzüge, 7 vols. (Leipzig, 1807-1832).

Wilkins, A. S. National Education in Greece in the Fourth Century before Christ (London, 1873).

Winckelmann, J. J. Geschichte der Kunst des Alterthums (Dresden, 1754). Windelband, Wilhelm. History of Ancient Philosophy, Eng. trans. (New York, 1899).

Winkworth, Susanna. The Life and Letters of Niebuhr (London, 1853).

Wissowa, Georg. De Macrobii Saturnalium Fontibus (Breslau, 1888).

Wolf, F. A. Prolegomena ad Homerum (Berlin, 1795); last ed. 1859.

Wolff, Max von. Lorenzo Valla, Sein Leben und Scine Werke (Leipzig, 1893).

Woltmann, Alfred von, and Woermann, Karl. A History of Painting, Eng. trans. (New York, 1901).

Woodward, W. H. Erasmus on Education (Cambridge and New York, 1904).

Z

Zacher, Konrad. Die Aussprache des Griechischen (Leipzig, 1888).

Zeissberg, Heinrich von. Die Polnische Geschichtschreibung des Mittelalters, &c. (s. l., 1847).

Zeller, Eduard. Aristotle (London, 1897).

History of Eclecticism, Eng. trans. (London, 1893).

Zingerle, A. R. Zu Spätern latein. Dichtern (Innsbruck, 1873).

GENERAL INDEX

Α

Abélard, 230. Academic School of Philosophy, 122. Ælius Herodianus, 114, 186. Ælius Præconinus Stilo, L., the first Roman philologist, 159, 160; his grammatical and critical work, 160. Æneas Silvius, 387. Æschylus, 72, 78, 94, 109. Æsthetics, 71. Æsthetic Criticism, in Plato, 72, 73; in Aristotle's Poetics, 73, 75. African Period of Latin, 186. Agricola, Rudolphus, 390 n. Albertus Magnus, 388. Alcæus, 33, 109, 119. Alciphron, 155. Alcuin, his influence on Mediæval study, 220-224, 238, 239, 385. Alexander Ætolus, 98, 106. Alexandria, founding of, 88; description of, 88-90; the Library and Mu-

seum at, 92-97.

Alexandrian Canon, 99, 100; its influence on Greek Literature, 100, 101.

Alexandrian Influence, 96, 97, 102; at Rome, 152.

Alexandrian Library, 92-94, 98, 100;

Alexandrian Library, 92-94, 98, 102; foreign books collected in, 93, 94; in Roman times, 93; its chief librarians, 98, 109; gradual destruction of, 116, 117.

Alexandrian Literature, 96-98, 101, 102, 106.

roo.
Alexandrian Philosophy, Jewish influence in, 102, 103.
Alexandrian Poetry, 96, 101, 102.

Alexandrian Schools, 95, 96; late representatives of, 116.

Alexandrian Science, 103, 104. Alexandrian use of terms φιλόλογος, φιλολογία, 2.

Algebra, 104; invented by the Egyptians, 105.

Alphabet, taught by γραμματιστής, 18; Plato's classification of the letters, 65; teaching of the alphabet in schools, 69, 70; Roman alphabet, 132.

Altgrammatiker, 422, 423.

Ammianus Marcellinus, quoted, 211, 212.

Anacreon, 34.

Analogy and Anomaly, 119, 120.

Anaximander, 21, 25, 26.

Anaximenes of Lampsacus, 21; his Homeric criticism, 44; his practical treatment of rhetoric, 45; his three rhetorical categories, 45.

Anaximenes of Miletus, 21.

Anglo-Dutch Period, 355.

Annalistic Method in Classical Philology, 3.

Anomaly, see Analogy.

Anthology, history of the Planudean Anthology, 256; of the Palatine Anthology, 256, 257; 344, 349.

Anthon, Charles, 452, 453.

Antiphon, first publishes speeches as models, 43.

Antiphrasis, as a principle in language, 68, 69.

Apelles of Ephesus, 83.

Aphorisms, Roman fondness for, 149, 155, 156; Varro's collection of, 162. Apollonius Dyscolus of Alexandria, founded scientific syntax, 185.

Apollonius of Perga, 103.
Apollonius Rhodius, 101.

Apuleius, as a word-maker, 148.

Aquinas, Thomas, 388.

Arabic, knowledge of, in the Middle Ages, 240.

Aratus, 96, 102.

Arcesilaus, 118.

Archæology and Antiquities, 250-254, 268, 269, 287, 288, 313, 315; in Russia and the Crimea, 401 n.

Archimedes, 103.

Aristarchus, 104; his critical methods, 109-116; his grammatical terminology, 109; his five critical processes, 110; his Homeric criticism, 109-111; his five note, 113; his successors, 114.

Aristobulus, 102.

Aristophanes, 72; his criticism of Euripides, 76.

Aristophanes of Byzantium, invents accents, punctuation, and critical signs, 98, 107, 108; his hypotheses to the dramatists, 98; helps establish the Canons, 99; his ten prosodia, 107; his criticism of texts. 107, 108; as the first scientific lexicographer, 108.

Aristotle, meaning of φιλολογία in, 2; his analytical treatise on rhetoric, 45-47; his conception of rhetoric, 47, 48; his metaphysical distinctions, 48; his Organon, 48; his ten categories, 48; the importance of his categories in the development of formal grammar, 48; his Poetics, 73-76; his dramatic criticism, 74, 75; his criticism of Homer, 78; his "casket edition" of Homer, 78.

Aristoxenus, 80.

Arithmetic in the Græco-Roman Period, 172, 173.

Ars Poetica, 181, 182.

Art, distinction between fine art and useful art, 73; æsthetic study of art, 127-129; mediæval art, 243; Byzantine art, 250, 251.

Arundel Marbles, the, 360 n. Asconius, Pedianus, 168.

Asiatic Style, 42.

Ast, G. A. F., 412.

Astronomy, 22, 103.

Athens, contrasted with Sparta, 28; as the champion of Hellas, 29, 30; as a centre of learning, 32, 35, 42; as a university town, 121-124.

Attic Style, 42.

Attius, his tragedies, 149; his Didascolica, 157 n.; his reforms in Roman orthography, 157 n.

Aurispa, Giovanni, his enormous collection of Mss., 279, 280.

Auspicius, 216.

Austria, classical studies in, 386-388.

B

Bacchylides, 34, 234.

Bacon, Francis, 357–359.

Bacon, Roger, 239-242; character of his writings, 239; his criticism of the Scholastics, 230; his suggestions as to Scriptural text-criticism, 240, 241; his Greek lexicon, 241; his glossaries and modern methods, 242. Bancroft, George, 451.

Baronius, Cardinal Cæsar, 300 n.

Beadus, Renanus, 396.

Beck, Carl, 452.

Bekker, August Immanuel, 405, 410 n. Benfey, Theodor, 419.

Benedictus (St. Benedict), 197; founds the order of the Benedictines, 200, 202, 203.

Bentley, Richard, assists Küster, 351; his relations with Hemsterhuys, 352 n., 353; included in the "Pleiad," 360; as a scholar, 361–365; his Phalaris, 365; his critical power, 366–370; bibliography to, 371 n.

Bergk, Theodor, 409.

Bernhardy, Gottfried, 413, 414.

Bernard de Chartres, his method of teaching, 230, 231.

Bernays, J., quoted, 74.

Bessarion, his founding of the Library of St. Mark (Venice), 273.

Biographical Method in Classical Philology, 3.

Biography, 120, 153, 154.

Blagoviestschenski, N. M., 401 n. Boccaccio, Giovanni, 267, 268.

Boeckh, August, 410 n. Boëthius, Anicius Manlius, 206; his De Consolatione Philosophiae, 206, 207; first writer to use Arabic (Hindu) numerals, 207: translated by King Alfred, Chaucer, and Oueen Elizabeth, 207. Boissier, Gaston, 427. Bopp, Franz, first scientific student of Comparative Philology, 418, 419. Borghesi, Bartolomeo, the first scientific epigraphist, 443. Bos, Lambert, 351. Botsford, G. W., quoted, 7, 8. Bouhier, Jean, 314. Brant, Sebastian, 301 n. British Museum, 381 n. Brown University, 450. Brugmann, Karl F., 422, 423. Bruni, Leonardo, 268. Bucheler, Franz, 417. Buda, University at, 399. Budæus, 304. Bugge, Sophus 424, 433, 434. Burgess, Prof. J. W., quoted, 244. Burlesque, of the Sophists, 65, 66, 76; of the tragic writers, 76; of Homer and the Cyclic writers, 77. PARODY. Burmann, Peter (the Elder), his Latin editions, 350, 351. Burney, Charles, his "Pleiad," 359, 360. Burton, Robert, 358 n. Butcher, S., quoted, 73, 74. Buttmann, P. K., 410 n. Byzantine Empire (New Rome), characteristics of its history, 210, 247-250; its art, 250, 251; its literature, 251, 254, 256, 257; its jurisprudence, 252, 253; its scholarship, 253-255; its pillage by the Turks, 272; its earlier relations with Italy, 260. C

Cajori, Florian, quoted, 22.
Calepinus, Ambrosius, his lexicon, 415 n; alterations herein, see Lexicography.

Callimachus, 93 n, 96; his bibliographical work, 98, 106; his lyric poetry, 101; his epigrams, 101.

Camerarius, 396.

Canon of Ten Sculptors, 129.

Canter, William, his use of Arabic numerals in verse, 343.

Carneades, 150.

Carnegie Institution, 92.

Carolingian Period of Middle Ages, 214-218, 225, 226.

Casaubon, Isaac, 306, 308-312.

Cassiodorus, Magnus Aurelius, 203, 204.

Castelvetro, F., 75.

Categories, of Anaximenes, 45; of

Aristotle, 46, 47. Catholicon, 247.

Cato, M. Porcius, his *Origines*, 153; as the originator of Roman prose, 152.

Catullus, Quintus Valerius, 152. Caylus, le Comte de, 315, 316.

Celtes, Conrad, 391 n.

Cephalas, 256, 344.

Charlemagne, his court school, 220.

Charles the Bald, 385.

Christomathies, see LEXICOGRAPHY.

Chrysoloras, Manuel, 269, 280.

Cicero, M. T., as a word-maker, 148; as a philosopher, 150; as a historian, 153; as an orator, 153.

Ciceronianism at the time of the Renaissance, 281, 282, 302, 303; cultivated by Ernesti, 400.

Ciriaco de' Pizzicolli (di Ancona), archæologist, 268.

City editions of Homer, 16, 17, 111, 112.

Clark, Victor S., quoted, 219.

Classical Archæology, studied in Great Britain, 380, 381; in France and Germany, 426–420.

Classical Philology, r-4; definition of, r-3; methods of treating, 3-4; history of, r-2.

Cobet, Caryl Gabriel, 424, 425.

Codex, meaning of, 280 n.

Colet, John, 295.

Collège de France, 305.

Columbia University (King's lege), 450. Comedy in Athens, 72, 76. Commodianus, 103. Comparative Philology, 3 n.; first attempt at. 308: first scientific study of 418, 419. Conington, John, 447. Constantinople, see Byzantine Em-PIRE. Cooper, F. T., quoted, 187. Corax of Syracuse, writes the first manual of rhetoric, 41; his rules, 41, Corpus Inscriptionum Atticarum, 441. Corpus Inscriptionum Græcarum 441. Corpus Inscriptionum Latinarum, 443. Corpus Iuris Civilis, 253. Corssen, W., 434-437. Corvinus, Matthias, 300. Cosmopolitanism at Rome, 186. Crates of Mallos, 119, 120; his view of Homer, 120; the "Bentley of Antiquity," 120; his conception of text-criticism, 119, 120; his works, 120; his embassy to Rome, 120; 157. Cratylus, synopsis of the dialogue, 61-67. Critical Signs, 98, 107, 108, 113, 114, 160, 166, 167, 186. Criticism, of the Homeric Poems, in Early Greece, 13, 20, 25, 27; its varieties, 39, 40, see TEXT CRITICISM: æsthetic, 73-75; of the drama in Greece, 74-77; subjective, 107, 368, 369; verbal, 305, 306; diplomatic, 336-340. See Text Criticism. Cruques, Jacques de (Cruquius). his studies of Horace in Mss. now lost, 342, 343; Codex Blandinianus, 342, 343.

Crusades, their influence on Europe,

Cujacius (Jacques de Cujas), his rela-

Curtius, Georg, the head of a school

struction of Roman law, 326.

of language study, 419, 420.

tions with Scaliger, 326; his recon-

257, 258.

Curtius, Ernst, 419.

Cyclic Poets, 12.

Col- Cylas, 174. Cynics, 51.

D

Dalberg, Johann von, 391 n. Damm, Tobias, 417. Dante, 261, 262. Dawes, Richard, 371. Demetrius, Magnus, 120. Demetrius Phalerius, 88-91.

Democritus of Abdera, 11; his theories of language, 58; his treatise on Glosses, 126 n.; his work on painting, 128.

Demosthenes, 44.

Descriptive Geography, see Geography.

Didascalica, 157 n.

Didymus Chalcenteros, his vast productiveness, 114, 116.

Dilettanti Society, 380.

Dindorf, K. W., 407.

Dindorf, Ludwig, 407 n.; 449. Dinocrates, the designer of Alexandria, 80.

Diogenes Laërtius, 60.

Diogenes of Apollonia, quoted, 40. Dionysius Thrax, the first teacher of formal grammar, 158-160.

Dittenberger, W., 441.

Dœderlein, L., 412.

Donaldson, J. W., 439.

Donatus, Ælius, 184, 185; abridgment of, 246.

Doratus, Auratus (Jean d'Aurat), teacher of Scaliger and Ronsard, 326. Downes, Andrew, 357, 360.

Drakenborch, Arnold, his great edition of Livy, 351.

Drama, its beginnings in Greece, 15; influence in Greece, 72, 75-77; na-

tive Roman drama, 131.

Dramatic Criticism, in Aristotle, 74, 75; the three Dramatic Unities, 75; in Theophrastus of Ephesus, 76; in Aristophanes, 76.

Drisler, Henry, 418 n, 454.

Du Cange, Charles du Fresne, his glossaries of Low Latin and Late Greek, 312. Duff, J. W., quoted, 136. Duns Scotus, 385, 388. Duris of Samos, 128. Duruy, J. V., 429.

E

Eckhel, Joseph, 403. Eclectics, 51; at Alexandria, 97, 102. Editiones Principes of the Fifteenth Century, 299, 300. Education, in early Greece, 17-19, 26, 27: in the Præ-Alexandrian Period. 49-51; the ancient universities, 121-125; in early Rome, 131; the Græco-Roman education, 171-101: monastic schools, 228-231. Egelsson, Sveinbjoin, "the Icelandic Homer. " 433. Egyptians, their influence upon early Greek thought, 22; their scientific knowledge, 105 n. Elkos, rhetorical meaning of, 41, 44. Eiodographic Method in Classical Philology, 9. Eleatic School, 24; linguistic theories of the, 56-50. Elegiac Poetry, in Greek literature, 33; in Latin literature, 152. Eliot, George, quoted, 446. Encyclopædists in Latin, 188-190. English universities, scholarly relations between English and Dutch Universities, 359, 447; the Oxford Press, 359; revival of Greek at, 359; English scholars of the seventeenth century, 360-363; the Cambridge Press, 364; deterioration of from 1750 until 1820, 377, 378; German influence

on, 446.

Ennius, Quintus, 138; changes made by him in Latin verse structure, 139-141; his *Annales*, 139, 140.

Epic Poetry among the Greeks, 9-12, 97; among the Romans, 134, 135; 130, 151.

Epicurus, his theory of the origin of language, 60; his endowment of a school at Athens, 122.

Epigrams, of Callimachus, 101; of Martial, 155.

Engraphy origin and development of

Epigraphy, origin and development of, in Antiquity, 167, 168; Greek, 441; Roman, of late development, 442, 443.

Epistulæ Obscurorum Virorum, 394,

Epitome of the Four Treatises, 114, 115. Erasmus Desiderius, 290; account of his life, 291-294; his writings, 294-297; his character and influence, 297-299.

Eratosthenes of Alexandria, styled φιλόλογος, 2; in the Alexandrian School, 98, 103, 106, 107.

Ernesti, Johann August, 400, 401. Ethics, in Homer, 18, 19; in the philosophy of Pythagorus, 22: of Socrates.

ophy of Pythagorus, 23; of Socrates, 50, 51.

Ethnographic Method in Classical Philology, 4. Etruscology, 436, 437.

Etymology, 52; Plato's discussion in the *Cratylus*, 61-67; popular etymologies, 66, 67; principles involved in developing words, 63, 64, 69; etymological schools among the Romans, 157, 162-164.

Euclid, 103. Eudemus, his history of geometry, 22. Eudoxus of Canidus, 174.

Eumenes, as founder of the Pergamene School, 118.

Euphemism, 69.

Euripides, 67, 72, 76, 78, 86.

Eusebius, his *Chronicle*, 189; restoration of, by J. J. Scaliger, 336–341. Everett, Edward, 451.

Exegesis, 72, 73.

F

Faber, Basilius, 397 n., 399.
Fabretti, Raffaele, 442.
Fabricius, George, 397 n.
Fabricius, J. A., 440.
Facciolati, Iacopo, 415–416.
"Families" of Manuscripts, 111.
"Father of History," see Herodotus.

Felton, C. C., 451. Fenestella, 168. Ferrero, G., 420. Fiction. see Prose fiction. Filelfo, Francesco, 281. Fisher. G., 452. Folk Literature among the Romans, 131, 156.

Foreign schools at Athens and Rome:

(1) French school at Athens, 427; (2) German school at Rome; (3) British school at Athens, 447; (4) British school at Rome, 448; (5) American school at Athens; (6) American school at Rome.

Forgeries, of manuscripts, 284 n., 285; of inscriptions, 442.

Frederick of Urbino, his remarkable library, containing a list of Greek authors now lost, 273.

French School of Classical Philology, 304-320; studies in music, geography, history, and gem-work by French scholars, 315, 316.

Froben, Johann, 294. Fronto, Marcus Cornelius, 186.

G

Gaisford, Thomas, 447, 449. Gaza, Theodorus, grammarian and translator, 280, 281, 295, 391 n. Geldner, K. F., quoted, 30. Gellius, A., 186; his Noctes Atticae, 188, 189. Gem-cutting, learned from the Egyptians, 83, 84. Genealogy, 35. Geographic Method in Classical Philol-Geography, 25; first scientific treatise on, 25; descriptive geography, 25, 35; 174, 175; first geographical dictionary, 176; in the French Period, 315; road-maps, 392 n. Geometry, 22, 23; developed by Euclid and Archimedes, 103.

Germany, early culture in, 388; schol-

asticism in, 388; humanism in, 388-

393; intellectual influence of, 385-455; periods of classical scholarship in, 393; study of Hebrew in. 394. Gesner, Conrad, 398. Gesner, J. M., 397 n. Gesta Romanorum, 190, 224, 225. Gibbon, Edward, 37, 378, 379. Gilman, D. C., 454.

Glosses, 125-127; various meanings of the word, 126; their relations to lexicography, 126; Pamphilius, 194. Glossographers, 127, 104.

Glossography, 126, 166, 167; see LEXI-COGRAPHY.

Gnipho, M. Antonius, 166. Goethe, J. W. von, 417.

Gorgias of Leontini, teaches rhetoric in Athens, 41-43.

Græco-Roman Period, 130-190.

Grævius (Johann Georg Gräve), 397 n. Gräfenhan, A., quoted, 26.

Grammar, its early relation to logic, 47: meaning of "grammaticus." 70; gradual development of grammatical terms by Protagoras, 70; by Prodicus, 49, 70; by Plato, 70; by Aristotle, 70, 71; by the Stoics and Alexandrians, 71, 109, 120; by Dionysius Thrax, 158; first treatise on formal grammar, 159; L. Stilo, 159, 160; M. T. Varro, 162; the first school grammar, 183; later grammatical writers among the Romans. 184-187; study of, in the monastic schools. 229, 231; grammatical theories in the Middle Ages, 236: modern theories of, 401 n., 405, 412-415.

Γράμματα, γραμματιστής, 18, 60. Grammatici Latini, 184-187. Grammaticus, 70; 172, 173. Gray, Thomas, 371.

Greek, in the Middle Ages, 235, 236; in the Renaissance and after, 269; taught in Italy by the Byzantines, 269; restoration of, in the English universities, 350.

Greek culture, antiquity of, 5-0. 394, 396-398; universities in, 388- Greek genius, character of, 83-87.

Greek Literature, beginnings of, 9-13; Homeric writings, 13-15; teaching of, 18-20; early criticism of, 20; historiography, 26, 34-39; at Athens, 28 ff.; varieties of, 33-45; study of, 71; criticism of, 71; 73-75; the drama, 72; parody, 76-78; genius of, 83-87; in Alexandria, 91-116; in Pergamum, 118-120; see RENAIS-SANCE.

Greek studies in Ireland, 235 n. Gregorovius, F., Gregory Nazianzen, quoted, 123, 124. Gregory of Tours, 216. Grimm's Law, 420, 421.

Grocyn, William, first teacher of Greek

at Oxford, 293.

Gronovii (J. F. and Jacob Gronov). their Thesaurus of Greek antiquities, 349.

Grotius Hugo (Huig van Groot), great classical scholar and constructive jurist, 347; his edition of Martianus Capella begun at the age of twelve, 347; his treatise *De Ture Belli et Pacis*, 348; his translation into Latin verse of the Planudean Anthology, 349.

Gruter, Janus (Jan Gruytère), his collection of Latin inscriptions, 342.

H

Hadley, James, 455. Haldeman, S., 435. Harpocration, Valerius, his lexicon to the ten orators, 194. Harvard, John, founder of Harvard College, 449. Havercamp, Siegbert, 352. Haupt, Moritz, 401 n., 433 n. Hebrew, study of, 240, 394, 398. Hecatæus, 25, 26. Hegemon, the originator of true parody, 77. Hegius, Alexander, 301 n. Heinsius, Daniel, pupil of Scaliger, 344. Heliodorus, 155. Hellanicus of Mitylene, 35.

Hellenes, origins of the, 5-8.
Hellenic Influence in Italy, 266-284.
Hemsterhuys, Tiberius, his acute criticism, 352; his edition of Lucian, 353; appointed professor in Leyden, 354; his fame in other countries, 354.
Henri, Victor, 427.

Henzen, Wilhelm, 443.

Hephæstion, on metres, 194. Heraclides Ponticus, his treatise on

language, 76.

Heraclitean School, linguistic theories of, 56-59.

Heraclitus, 21; his view of language, 56-60.

Herennius Philon, 194.

Hermeneutics, 73, 87.

Hermann, Gottfried, 401 n., 405.

Hero of Alexandria, 104, 105.

Herodotus, his contributions to geographical knowledge, 34, 35; quoted, 34, 35; his history, 34.

Hesiod, 13.

Hessus, Helius Eobanus, 306.

Heyne, Christian Gottlob, 403.

Hieronymus (St. Jerome), 148, 195. Hipparchus, 103.

Hippias of Elis, his experiments in

literature, 50, 51.
History, 26, 34; in Greek literature, 34-38; among foreigners, 54, 55; in Latin literature, 153, 154; the Byzantine historians, 254, 258; later historians, — Gibbon, 378, 379, Niebuhr, 408-410, Curtius, Ernst, 410, Grote, 428, Thirlwall, 428, Duruy, 429, Boissonade, 429, Mommsen, 443, 444, Ferrero, 429.

Holmes, O. W., quoted, 182.

Homeric Epic, character of the, 9, 10; early interpolations in, 9, 14-16; preservation of the probable archetype, 9, 15; inspirational theory of, 10-12; influence upon Greek thought, 11, 12, 17, 19, 26, 27; ethical value of, 11, 18, 19; early criticism of, 13-15, 20, 44; allegorical and rationalistic explanation of, 20; burlesques of, 77; editions made by Aristotle, 78, 79.

Homeric Hymns, 13. Homonymy, 58. Horatius, I. Flaccus, quoted, 19; as a satirist, 140; as a lyric poet, 152; as a critic of literature, 181, 182. Humanism, 260-271; contrasted with Mediævalism, 270-273; in Germany, 388-394, 396-398; the New, 417. Humboldt, of Antiquity, the, see Herodotus. Hungary, classical studies in, 399. Hurd, Richard, 371. Hutten, Ulrich von, 395. Hylozoism, 21. Hymns, Homeric, 13; Latin, 218. Hypsicrates, etymological school of, at Rome, 157, 158.

Ι

Iambic Poetry, 33.
Iamblichus, 103.
Iberians, the, 6.
Iliad, the, see Homeric Epic.
Interpreters of foreign languages, among the Greeks, 54.
Invasions of Italy, 213, 214.
Ionian Greeks, 17, 18, 28; educational influence of, 17, 18.
Ionian School of Philosophy, 21, 22, 24.
Ireland, Classical Scholarship in, 226; Mediæval Schools in, 226 n.; Latinity in, 233.
Irony, 69.

Isidorus of Seville, 187, 188; his Origines, 190; his De Natura Rerum, 190; on the mystic number Seven, 248.

Isocrates, the first artistic orator, 43; his success as a rhetorical teacher, 43; obligations of Cicero to, 44.

Italian Period of Scholarship, 284, 303, 304.

Itineraria, 175, 392 n.

J

Jäger, Johann, 395. Jahn, Otto, 438, 439. Jebb, R. C., 447. Jerome, 148, 195. Jevons, F. B., quoted, 36. John of Salisbury, 231, 232.

Justinianus, 252.

Jones, Sir William, his knowledge of Oriental languages, 382; his appointment as a judge in Bengal, 383; his translations from the Sanskrit, 383; his anticipation of Comparative Philology, 383, 384. Jowett, Benjamin, 448. Juba of Mauretania, 194. Junggrammatiker, 393, 422. Junius, Franciscus, his study of ancient painting, 344.

ĸ

Kaibel, Georg, collector of 1200 epigrams, 441-442. Kiepert, Heinrich, 439 n. Kirchhoff, A., 441. Klassische Alterthumswissenschaft, 3. Klotz, R., 415. Köhler, H. E., 401 n. Krüger, K. W., 412. Küster, Ludolf (Ncocorus), his devotion to Greek, 351; his edition of Aristophanes with the scholia, 351.

L

Laberius, D., 149.
Lachmann, Karl, 405–407; his Homer, 405; his Lucretius, 406; his methods of text criticism influenced by Bentley, 406; by Wolf, 406; his text criticism of the New Testament, 407.

Lambinus, Dionysius, 306, 307, 407. Lane, G. M., 452.

Langen, Rudolf von, 391 n.

Language, study of, in connection with philosophy and psychology, 51, 52; theories regarding the origin of, 51-69, see Varro; indifference of the Greeks to foreign languages, 52-55; Eleatic theory of, 56-59; Heraclitean theory of, 56-60.

Lasus of Hermione, 79.

Latin language, its characteristics, 131, 136, 139-141, 217, 218; as modified by Ennius, 141; by Plautus, 142-147; by Lucretius, 147-148; by Cicero, 148; by ecclesiastical writers, 148; the sermo urbanus, 156; the sermo cotidianus, 156; the sermo plebeius, 156, 217; de line of, 193, 194; used in the Mediæval Church, 206-210; used as a diplomatic language, 216; used as a liturgical language, 217; late Latin, 217-223, 229, 232; semibarbarous Latin, 218; scholastic Latin in thirteenth century, 232; use of, in Hungary and Poland, 300 n.

Latin literature, native period of, 130-134; early Hellenic influence on, 134-137, see Ennius, Plautus, Pacuvius, Terentius, Lucilius, Lucretius; the Golden Age, 151-153, see Epic Poetry, Lyric Poetry, Prose Fiction, Criticism, Varro; Spanish influence, 176, 178, 186, 187, 190; Roman oratory, 176-181; the Silver Age. 178-181, see Quintilianus, Seneca, Tacitus, Suetonius, Plinius Maior, O. Remmius Palæmon: the African Period, 186-188, see Apuleius, Fronto, Tertullianus, Aulus Gellius. Law, Roman, 252-253.

Lehrs, Karl, 407, 411, 412.

Leo, F., 419.

Lessing, Gotthold Ephraim, 403. "Letter-play," 69.

Lexicography, beginnings of, 96, 97, 126; scientifically undertaken by Aristophanes of Byzantium, 108; developed by glossographers, 126; at Rome, 165–167, 194; in the Middle Ages, 244–247; by Suidas, 254; in the Byzantine Empire, 254, 255; during the Renaissance, 281, 304; lexicon of Calepinus, 415; unrivalled Greek lexicon of Stephanus (Robert Etienne), 305; in Italy, 415, 416; in Germany, 416, 417; in England and in the United States 418 n.

Liberal Arts, the Seven, 237, 238.

Libraries: the libraries at Alexandria, 92–94, 98, 102; private libraries at Rome, 109, 116, 118; at Pergamum, 118; public libraries at Rome, 161, 198; at Constantinople, 198; monastic libraries, 233–235; Vatican, 273; St. Mark's, 273; Library of Urbino, 273.

Libyans, the, 6.

Licymnius, his classification of synonyms. 68.

Ligurians, the, 6.

Linguistik, 3 n.

Lipsius, Justus, 317; his study of Palæography, 318; his reverence for Tacitus, 319; his death, 327.

Literary Criticism, 20, 21; by Plato, 19, 71, 72; by Aristotle, 73-75; by the Sophists, 76; in the form of burlesque, 76-78; by the Alexandrians, 96-102; by Crates, 120; at Rome, 180-183.

Literary Study in early Greece, 18; in the Præ-Alexandrian Period, 71; by the Alexandrians, 96-98; by Crates, 120, 157 n.; by the Romans, 160-164, 166, 169; by the Byzantines, 251, 254, 256, 257; by the Mediævals, 237, 238.

Literary Teaching, beginnings of, 18, 19; by the Sophists, 49, 50.

Littré, Emile, 426.

Livius Andronicus, 134, 137.

Livius, Titus, 153, lost books of, 277, 278.

Lobeck, Christian August, 405, 411. Logic, 46-47; in relation to language, 51-60.

Logographi, 26.

Louis the Pious, 385.

Louvain, "the Belgian Athens,"

Lucilius, C., 140.

Lucretius, his theory of the origin of language, 60; his philosophical vocabulary, 147, 148; as a poet and philosopher, 151.

Luder, Peter, 390 n.

Lullius, Raimundus, 241, 242.

Luther, Martin, 298, 302, 392, 395, 397.
Lycophron of Chalcis, 99, 101, 102, 255.
Lycurgus of Athens, his recension of the tragic poets, 78, 79.
Lycurgus of Sparta, 17.
Lyric Poetry, among the Æolians and Dorians, 33; at Alexandria, 101, 105; in Latin literature, 131, 134, 151, 152.
Lysias, 43.

M

Mabillon, Jean, 314. Macedonian ascendency over Greece, 84. Macrobius, his Saturnalia, 189. Madvig, Johann Nicolai, 423-425. Mahaffy, J. P., quoted, 19. Mai, Cardinal, 166. Manuscripts, collection and preservation of, 204-206, 273-280; during the Middle Ages, 233, 235; list of the oldest classical manuscripts, 202, 234, 235; at Constantinople, 272; probability of recovering Mss. now lost, 273 n.; recovery of lost Mss. in recent times, 440, 441. Maps, see Geography. Maria Theresa, 300, 403. Mariette, P. J., 315. Martianus Capella, 237, 238. Massilia, the University at, 125. Mathematics, 22, 103, 105. Matron of Pitana, 77. Matthaei, C. F., 401 n. Maximus Planudes, 256. Mayor, J. E. B., 448. Mediævalism, characterized, 242, 243, 270; contrasted with Humanism, 270-273. Mediterranean race, the, 6. Meineke, August, 407. Mela, Pomponius, 176. Melanchthon (Philipp Schwarzerd), 306, 307. Meleager, 256. Melic Poetry, 33. Menander, 86, 91, 234. Merriam, A. C., 453.

Metres, early treatises on, 76. Middle Ages, foreshadowed in the second century A.D., 192; decadence of Classical Latin, 193, 194, 214-220: influence of Christianity on classical learning, 195-200, 215-217; separation of the Eastern from the Western Empire, 199; Monachism, 200-204; invasion of the Roman provinces, 213, 214; end of Middle Ages, 214; periods of mediæval scholarship, 214; popular use of Latin after the fall of Rome, 214-223; grammatical theories in, 236; art in, 243; philosophy in, 244, 263; letters and learning in, 244-247, 386.

Metaphor, its use in language, 68.

Mock-heroic, 77.

Missing Analogy, 50.

Mommsen, Theodor, his remarkable versatility, 443; his plan for the Latin *Corpus*, 443; his history of Rome, 444; his supplementary papers, 444.

Monachism, 200-204.

Monastic Scholars, 222-225; their books, 223 n.

Monastic Schools, 228–231.

Montanus, 196.

Monte Cassino, 202.

Montfaucon, Bernard de, 306, 313, 314.

Müller, Lucian, 402 n., 407 n.

Müller, Otfried, quoted, 3; his monograph on the Etruscans, 437; his history of Greek literature, 439.

Munro, H. A. J., quoted, 406; his edition of Lucretius, 407, 448.

Muratori, L. A., his new Thesaurus, 442, 443.

Muretus, Marcus Antonius, 306, 308, 326.

Museum, the Alexandrian, 92-95; the Pergamene, 119; the Vatican, 428; Louvre, 427; British, 381 n.; at Copenhagen, 433; American.

Music, 33; early Greek treatises on, 79; foundation of Classical modes among the Greeks, 80, 81; vocal, 80, 81; notation of, in Greece, 81, 82;

Fleischer's theory of Greek modes, 81, 82; at Rome, 82.

Muth, Conrad (Mutianus Rufus), 395.

Myron, 42.

Mythic Cycle, 12, 13.

Mythology, the oldest treatise on, 13; a great anonymous manual of, 116.

N

Nævius, G. N., 134; his Punica, 135, 136. Nasalis Sonans, 422, 423. Nauck, August, 402 n., 408. Neo-Platonism, 102, 103. Netherlands, rise of scholarship in, 316, 317. Nettleship, Henry, 447. New Learning, the, 284, 285. Nicholas V., 272. Niebuhr, Barthold G., 37, 408-410. Nisard, Désiré and Charles, 426. Nitzsch, K. F., 411. Nonius Marcellus, 180. Numerals, Arabic (Hindu), 207. Nuremberg Chronicle, 390.

0

Odyssey, the, see Homeric Epic.

Odoacer, 213.

Onomantia, 67. Onomatopoetic theory of language, see Heraclitean School. Oratory, in the Præ-Alexandrian Period, 39; as an art, 39-47; Asiatic Style of, 42; Attic Style of, 42; its relation to Rhetoric, 43-48; in legal proceedings, 41, 43, 46; taught at Rhodes, 124; at Rome, 132; orations written for friends, 159; Quintilian's teaching of, 178, 170. Oriental influence on Europe, 258. Oriental languages: Arabic in the Middle Ages, 240; Hebrew in the Middle Ages, 240. Osborn of Gloucester, 247. Oudendorp, Franz van, revives Latin at Leyden, 354.

P

Painting in Early Greece, 82, 83; encaustic painting, 83. Palæography, 314. Pamphilius on Glosses, 194. Panorama, 247. Papias, 246. Paris, Gaston, quoted, 457, 458. Parmenides, 24. Parody, 77, 78, see Burlesque. Paronomasia, in Greek, 66, 67. Parrhasius, 83. Parr, Samuel, 372, 373. Pater, Walter, quoted, 288. Paulsen, Friedrich, quoted, 388, 389. Paulus Diaconus, 160. Pausanius, 176. Pausias, 83. Pelasgians, the, 6. Peloponnesian War, 35. Pennsylvania, University of, 450. Pergamene Library, its foundation, 118; catalogued by Callimachus, I 20. Pergamene School, 118-120; contrasted with the School at Alexandria, 117, 118; how founded, 118-120; under Crates of Mallos, 119-120.

120. Pergamum, description of, 118, 119. Pericles, the Age of, 42, 43. Peripatetic School of Philosophy, 122,

Persian Wars, their influence on Greek civilization, 20–32.

Persius Flaccus, 149, 183.

Petrarca, Francesco, his studies, 264; his Latin epic, 264, 265; his recovery of classic authors, 265, 266; his relations with the German Emperor, 386, 387.

Petronius, C., 154, 157, 161; quoted, 177 n.; read in schools, 246; discovery of Cena Trimalchionis in 1663, 314.

Phidias, 42.

Philetas of Cos, first attempt at an Homeric lexicon, 96, 127.
Philologist, various meanings of, 1-3.

Philology, various meanings of, 1-3. Philosophy, origin of, in Greece, 21; the Ionian School, 21; Heraclitus, 21: Pythagoras, 22-24; the Eleatic School, 24; Aristotle, 48, 122; Socrates and the Sophists, 50, 51; the Sceptics, 50; the Stoics, 51, 122; the Epicureans. 51, 122; Cynics, 51; the Eclectics, 51, 97; Plato, 63-65, 122; Alexandrian philosophy, 102, 103; philosophical studies at Rome, 147, 150, 151; Mediæval, 243, 244, 263; in the Renaissance, 263. Photius, 254. Phrynicus, 411. Pindar, 32-34. Pisistratus, alleged recension of Homeric poems by, 14-16. Plato, first uses terms φιλόλογος, $\phi \iota \lambda o \lambda o \gamma \ell a$, r; his opinion of writing, 10; his linguistic theories, 61-67; his physiology of language, 63-65; his ridicule of popular etymologies, 65, 66; classifies letters of the alphabet, 65; his grammatical distinctions, 70. Plautus, T. Maccius, his place in Roman literature, 138; his enrichment of the Latin vocabulary, 142-148; comparison with Shakespeare, 143, 144: text criticism of, 160: Varro's Plautine Canon, 165. Plebeian Latin. see SERMO PLEBEIUS. Plinius Maior, 188. "Poetic Prose," 284. Poetics of Aristotle, 73-76. Poetry, inspirational theory of, 10-Poggio Bracciolini, Francesco, 276-279. Politianus, Angelo de, 282, 283. Political Science, 38. Pollux, Julius, his dictionary, 194. Polus, 68 n. Polyclitus, his "Canon," 128 n. Polygnotus of Thasos, 82.

Polyonomy, 58.

Pompeius Festus, 160.

Porson, Richard, characteristics of, 374.

375; his work and reading, 375-377; restores the Rosetta Stone, 376; his letters to Travis, 376; the Three Heavenly Witnesses, 376; Porsonian type, 377. Post-Renaissance Period, 280.

Præ-Alexandrian Period, characterization of, 84-86; its end, 87.

Princeton University (College of New Jersey), 450.

Printing, introduction of, 285; development of, 285, 286; centres of early book production, 286; effect upon Classical scholarship, 286, 305.

Priscianus Scianus of Constantinople. 185, 186; his grammar abridged. 239; introduced into Germany, 386. Private editions, III.

Probus Berytius, M. Valerius, 186.

Procopius, 252.

Prodicus of Ceos, as a lecturer on style, 49-50; his treatise on synonyms, 50, 70.

Pronunciation, of Greek, 241 n., 200: of Latin, 434.

Prose, beginnings of Greek, 26; development of, 34, 35; Latin, 153, 154; methods of studying, 177, 178.

Prose fiction (Greek and Latin), 154. 155; at Byzantium, 253.

Protagoras of Abdera, as a teacher of rhetoric, 40, 51; first distinguishes grammatical moods and genders, 70. 70 n.

Protestant Reformation, effects of. 301-303.

Ptolemius, Claudius, 176.

Ptolemy Soter, 90.

Publilius Syrus, 149.

Punctuation, in Greek, 98, 108.

Punic Wars, 31, 153, 154.

Pyrgoteles, 84.

Pythagoras, 21-24; Golden verses of, 24.

Q

Quadrivium, 238. Ouintilianus, M. Fabius, his treatise on education, 178-181.

R

Rabanus (Hrabanus) Maurus, 185, 238, 239, 275, 385-386.

Rask, R. K., his study of Old Persian, 420, 421.

Regiomontanus (Johann Müller), 387. Reiske, Johann Jacob, 401.

Reitz, J. F., 353.

Religion, 11, 13; taught by Pythagoras, 23, 24; philosophical religion at Alexandria, 102, 103.

Remnius Palæmon, Q., 183.

Renaissance, the, characteristics of, 260-264; causes of the, 262, 270-274; philosophy in, 263; early scholars of, 281; Italian Period, 284, 285; results of the, 285, 287, 288; Ciceronianism in, 302, 303.

Reuchlin, Johann, 393, 394.

Rhetoric, 40-51; first treatise on, 41; taught in Athens by Gorgias, 43; critically expounded by Aristotle, 45, 48; popularized by the Sophists, 49-51; the Alexandrian rhetoric, 98, 101; exhibition of, by Carneades, 150.

Rhinthon of Tarentum, 78. Rhodomann, Lorenz, 399.

Ribbeck, Otto, professor in five universities, 440.

Richardson, J. F., 436.

Rienzi, Cola di, 442.

Ritschl, Friedrich, 407, 434, 439; his edition of Plautus, 439, 440.

Romance Languages, 219; study of, by Germans, 426.

Romans, early history of, 130-134; early literature of, 131-136, 138, 142-144, 148, 149; their first relations with Greece, 132-134; Hellenic influence on, 134; national characteristics of, 136-138.

Roman use of philologus, philologia,

Rome, in the first century A.D., 170, 171; schools at, 172-181; the city in the fourth century A.D., 211, 212.

Ruhnken, David, 354, 358.

Russia, development of classical stud- Schola Palatina of Charlemagne, 220.

ies in, 400 n.; universities in, 400 n.; German influence in, 400 n.

S

Saintsbury, George, quoted, 20.

Salmasius (Claude de Saumise), discovered the Palatine Anthology, 344; edited Florus in ten days, 345; edited the Historia Augusta, 345; his commentary on Solinus, 345; his calls from Oxford, Padua, and Bologna, 345; receives research professorship in Leyden, 345; his controversy with Milton, 346; personal characteristics, 347.

Salutati, Colutius, first Ciceronian, 268. Sanskrit, first grammar of, 384.

Sappho, 33.

Satire, a Roman form of literature, 135, 149, 150, 162.

Savile, Sir Henry, tutor in Greek to Queen Elizabeth, 355; his translations from Tacitus, 355; becomes Provost at Eton, 356; helps prepare the authorized version of the Bible, 356; produces a great edition of St. Chrysostom, 356; a founder of the Bodleian Library, 356.

Scaliger, Joseph Justus, 323–341; his early teaching, 323; his knowledge of Greek and Arabic, 324; his travels in England and Scotland, 326; his stay with Cujacius, 326, 327; his call to Leyden, 328; his feud with Caspar Scioppius, 329; his Epistula de Gente Scaligera, 330, 331; his Confutatio Burdonum, 332; his learning as a chronicler, 333–336; his Manilius, 337, 338; his Eusebian Chronicle, 339, 340; his personal characteristics, 341; temporary decline of his reputation, 341.

Scaliger, Julius Cæsar, 320, 321; his Latin Grammar, 322; his physical theory, 322.

Sceptics, the, 50.

Schliemann, H., his remarkable excavations, 445.

Symonds, J. A., quoted, 200. Scholasticism, period of, 214; its prin-Synchronistic Method in Classical cipal features, 227, 228. Philology, 3. Scholia, origin of, 125. Schools, see Education. Т Scioppius, Caspar (Caspar Scioppe), 320-331. Sears, L., quoted, 39, 40. Tabula Peutingeriana, 175, 302 n. Tarsus, the university at, 124. Seneca, quoted, 3. Sermo Cotidianus, 156. Teachers, in the Græco-Roman Period, Sermo Plebeius, 156. 172-173. Sermo Rusticus, 215. Tegnér, Esaias, 433. Terentius, P., 149. Sermo Urbanus, 156. Terpander of Lesbos, 33, 80. Servius, 184. Tertullianus, M. Aureus, 186, 196, Seven, as a mystic number, 248. Seymour, T. D., 455. 107. Short, C. L., 454. Text Criticism, beginnings of, 13-16; Sicily, first rhetorical teaching in, 41. undertaken by Aristotle, 78; by Lycurgus of Athens, 78; at Alexan-Silli, 78. dria, 98, 104-116; at Pergamum, Simonides, 72, 73. Socrates, essentially a Sophist, 50; in-119, 120; Ælius Stilo, 160; by Varro, 165; by other Romans, 166, fluence of his teachings, 50, 51; as a critic of poetry, 72, 73; burlesques 167; see Criticism. the Sophists, 65, 66. Thales, 21. Theocritus, 101. Solon, 16, 28. Sophists, the, 49; character of their Theon, 116. Theophrastus of Lesbos, his treatises teaching, 49-50; their influence on on comedy, on style, and on metres, Greek philosophy, 50-51; lesqued by Socrates, 65, 66; literary 76; succeeds Aristotle and endows Peripatetic School, 122. criticism by, 76. Thiersch, F. W., 412. Sophocles, 42. Sophocles, E. A., 452. Thrace, mythical poets of, 10. Thucydides, 35-37. Spalding, Georg, 410 n. Spanheim, Ezechiel, as a numismatist, Ticknor, George, 451. Timon of Phlius, 77, 78. Spanish Latinity, Period of, 178, 183. Tisias, 41. Spengel, L., 412. Topography, 175, 176. Tournier, Edouard, 426. Stephani, L., 401 n. Tragedy, 72; discussed by Aristotle, Stephanus, Henricus, 305. Stephanus of Byzantium, 176. 73-75; among the Romans, 148, 140. Stephanus, Robertus, 305. Trebonianus, 252. Tribal Age in Greece, 7. Stoics, 51; their language teaching, Trigonometry, 104. IIQ. I2O. Strabo of Amasia, 174, 175. Trithemius, Johannes, 239, 391 n. Studium Generale, 231. Triumvirate, the, 317. Sturm, Johann, 397, 398. Trivium, 238. Style, 40, 47, 49; Asiatic, 42; Attic, Trojan Cycle. 12. 42; Alexandrian Stylists, 98; Latin, Tryphon, 116. in antiquity, 135, 138. Turnebus, Hadrianus, 306, 307. Tyrwhitt, Thomas, 372. Suetonius Tranquillus, Gaius, 171. Suidas, his lexicon and its sources, 254. Tzetzes, Ioannes, 255.

U

United States, universities in, 449-451; classical scholarship in, 452-455; German influence in, 452-455. Unities, the dramatic, 75. Universities, at Alexandria, 92-97; Pergamum, 117-120; at Athens, 121-124; at Rhodes, 124; at Lesbos, 124; at Tarsus, 124; at Paris, 226, 426-428; at Bologna, 231; in England, see English Universities; in Germany, 232, 388-393; in Hungary, 399; in Poland, 399 n., 400 n.; in Russia, 400 n.; in Holland, 430; in Belgium, 431; in Scandinavia, 432-434; in the United States, 449-451. Ussing, Johan Louis, 432, 433.

v

Valckenaer, Ludwig Caspar, 358. Valla, Lorenzo della, 281; his treatise on style, 281, 282; his contemporaries, 281; his Ciceronianism, 281, 282; his first suggestion of Biblical criticism, 204. Varro, M. Terentius, 160; as an encyclopædist, 160-161; as a man of affairs, 160, 161; his treatise De Lingua Latina, 162-164; his Antiquitatum Libri, 162; his other works 162; his Plautine Canon, 165. Vatican Library, the founding of, 273. Verner's Law. 421. Verrius Flaccus, M., 168-170. Victorius Petrus, 283, 284. Viermenner Scholien, 114, 115. Vipsanius Agrippa, M., 175. Vocabulary, Latin, 141; enrichment of, by Plautus, 145-147; by Ennius, 141; by Lucretius, 147; by Cicero, 148; by Tertullian, 148; by Apuleius, 145, 146, 148; Plebeian Latin, 156. Voevodski, L. F., 401 n.

Vossius, Gerhard Johannes, 343, 344; his Ars Poetica, 343; his two great historical treatises, 343; his monographs on Art and Mythology, 344. Vulgate, the, criticised by Roger Bacon, 241; edited at Oxford, 241.

W

Walafrid Strabo, 385. Warfare, as a stimulus to intellectual productiveness, 31, 32. Watts. 2. Welcker's Cyclus, 438. Whitney, W. D., 454, 455. Willems, Pierre, 432 n. William and Mary, College of, 449. Wimpheling, Jacob, 391 n. Winckelmann, Johann Joachim, 402. 403, 417. Wolf, F. A., matriculation at Göttingen of, 2; 403, 404. Wölfflin, Eduard, 416, 417. Woolsey, T. D., 451. Writing, Plato's opinion of, 19. Wyttenbach, Daniel, 358, 359.

X

Xenophanes, rejects Homeric theology, 24. Xenophon, the historian, 37, 38.

Y

Yale, Elihu, founder of Yale College, 449.

Z

Zeno, 24.
Zenodotus of Ephesus, 98; his criticism of texts, 105, 106; as a lexicographer, 106; called Δωρθωτήs, 105.
Zeuxis, 83.
Zumpt, K. G., 415.

 T^{HE} following pages contain advertisements of a few of the Macmillan books on kindred subjects

By JAMES BRADSTREET GREENOUGH Late Professor of Latin in Harvard University

AND GEORGE LYMAN KITTREDGE

Professor of English in Harvard University

Words and Their Ways in English Speech

Cloth, 12mo, x + 431 pages, \$1.10 net

"As valuable as a dictionary and as readable as a vivid piece of narrative or descriptive writing. It is indispensable to every student writer."—Boston Transcript.

By GEORGE R. CARPENTER

Professor of Rhetoric and English Composition in Harvard University

Exercises in Rhetoric and English Composition

Cloth, xiii + 222 pages, \$1.00 net

"The text represents the substance of teaching which a freshman may fairly be expected to compass, and it is set forth with a clearness and directness and brevity so admirable as to make the volume seem almost the realization of that impossible short method of learning to write which has often been sought for, but never with a nearer approach to being found. . . . We do not hesitate to give unreserved commendation to this little book."—The Nation.

PUBLISHED BY

THE MACMILLAN COMPANY

64-66 Fifth Avenue, New York

By CALEB T. WINCHESTER

Some Principles of Literary Criticism

Cloth, 12mo, \$1.50 net

A compendious statement of the essentials of literature and the grounds of critical estimate. The author has attempted neither to expound a philosophy of criticism nor to elaborate a critical method, but simply to state some qualities that by common consent are to be found in all writing deserving to be called literature, and to lay down some fundamental principles that must be assumed in all sound critical judgments.

By CRAVEN LAYCOCK AND ROBERT L. SCALES Argumentation and Debate

Cloth, 12mo, \$1.10 net

In this work the peculiar difficulties which stand in the way of making a text-book at once teachable, practical, and easily understood, for use in teaching argumentation and debate, have been overcome. The treatment of the topics presented—the proposition, the issues, preliminary reading, evidence, kinds of arguments, fallacies, brief-drawing, the principles of presentation, refutation, and debate—is lucid and interesting as well as highly profitable.

By HENRY SEIDEL CANBY AND OTHERS

English Composition in Theory and Practice

Cloth, 12mo, \$1.25 net

A thoroughly practical book of directions for good writing, based upon sound principles. An extensive collection of examples drawn from all the forms of discourse and inclusive of brief excerpts and complete essays is also included. The authors, who are professors of English composition in the Sheffield Scientific School of Yale University, have so handled their subject that the work is not limited to any one class of students, but is of a general interest to all concerned in the writing of good English.

PUBLISHED BY

THE MACMILLAN COMPANY

64-66 Fifth Avenue, New York